The Use of Self-Tracking Technologies and Social Media in Self-Representation and Management of 'Health'

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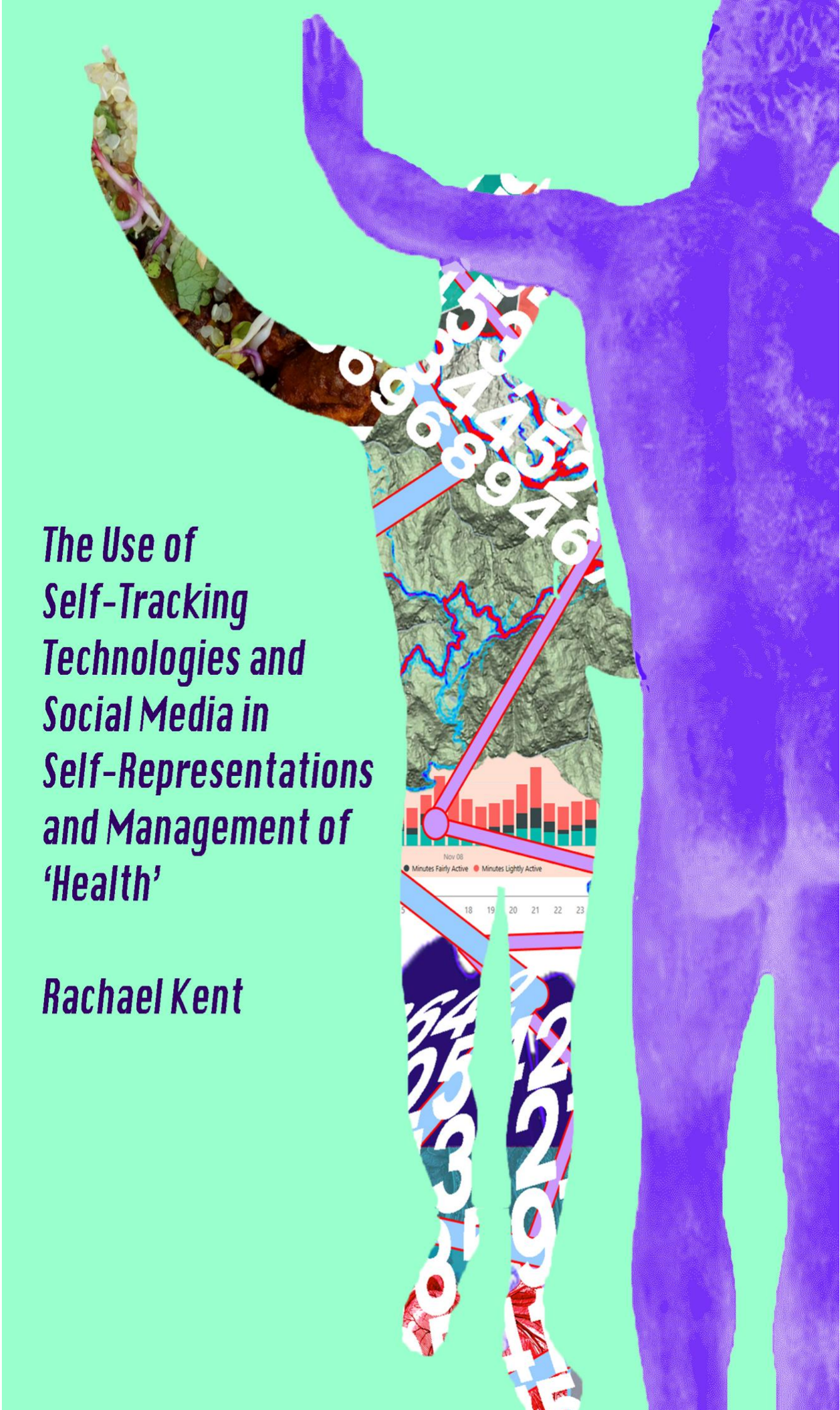

The Use of Self-Tracking Technologies and Social Media in Self-Representations and Management of 'Health'

Thesis submitted in partial fulfilment of the degree of Doctor of Philosophy, King's College London, University of London

RACHAEL CHRISTINE KENT

June 2018

DECLARATION

I declare that this thesis is my own account of my research and contains as its main content, work which has not been previously been submitted for a degree at any higher education institution. The word count of this thesis is 99, 962 (in total 116, 827).

Signed: 

Date: 8th June 2018

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ABSTRACT

Self-tracking technologies, which are advocated through health promotion strategies in neoliberal states, as well as by the corporations who market their benefits, have until very recently evaded critique and been primarily promoted as revolutionary tools for 'health' betterment. At the same time, these technologies demonstrate the shift from a public welfare state responsibility for health towards individualised self-care practices. Research has attended to the role of self-tracking technologies in multiple settings such as work, education, insurance schemes, and leisure pursuits. However, no research has examined their use in representations of 'health' on social media. This thesis fills a research lacuna, by exploring how these performed and curated 'health(y)' identities impact health behaviours in users' daily lives, through self- and peer surveillance of 'health'-related content. Through a textual and thematic analysis of empirical ethnographic data from semi-structured interviews, guided reflexive diaries and an analysis of online content, this thesis examines how self-representations of 'health' from self-tracking technologies and social media (Facebook and Instagram) influence 'health' management in users' (online and offline) everyday lives. Over the (three to nine-month) research period, the methodologies encouraged unanticipated reflexive engagement from the participants, in relation to their tracking, sharing and 'health' practices. Additionally, this approach provided a new lens through which to explore distinctions between online and offline 'divides' and negotiations from a user perspective.

The empirical findings identified both the qualitative and quantitative self-representations and practices of self-tracking in managing the body and 'health'. The collaborative information produced within these data-sharing cultures changes user behaviours, understandings of the body and what is deemed as 'healthy', in relation to others. Diet, lifestyle and the body are tailored to what is aesthetically pleasing on social media. The embodiment of 'good health', feeling morally 'better' and physically 'well' are empowered through feedback and (imagined) community surveillance, motivating users to continually self-survey, document and share 'health' representations. In contrast, these practices frequently distracted participants from personal 'health' goals, gratification and experience. When technology is removed or resisted from within these surveillant cultures, regulation of the body, with or without the tools and 'technologies of the self', is still prevalent, preventative and self-policing. At the core of these practices are complex assemblages of knowledge, technologies, subjectivity and ethics, which force users to bring the future into the present by controlling their bodies for the expectation and promise of better, 'healthier' and 'optimised' futures. In turn, future 'health' is demanded as a reward for past management of the body.

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PREFACE

It took three visits to Accident and Emergency before my (mis)diagnosed 'flu' was taken seriously and I was admitted to my local hospital in east London. I had not been able to walk for five days and I knew instinctively that something was wrong in my body. Later that afternoon, an ultrasound detected two egg-sized abscesses on my kidneys, and I was rushed that evening to the specialist renal unit at the Royal London Hospital. From here, I began a very unstable few weeks in hospital, filled with painkilling drugs and antibiotics in an attempt to prevent invasive surgery. I could not move from my bed for a long time. In and out of consciousness for a few weeks, I was unable to eat, and suffered multiple organ failure. The sepsis inflamed my entire body, which in turn, collapsed my lungs. When I was awake, the look on the doctors' and my family's faces told me what I already knew in myself - this was serious. One evening when I woke during the night with the pain, a kind nurse comforted me and told me to fight really hard to get better, which frankly served to terrify me further because I trusted what my body was telling me, and I did not feel any ounce of strength in me. I had lost two stone in ten days and just felt intoxicated by illness, and by the drugs that were trying to help me.

I want to emphatically state that this is not intended as a tale of woe or as a self-indulgent inspirational story of overcoming a life-threatening illness. What is important to note is that what had happened to me was not random or a matter of bad luck. Three weeks prior to being admitted to hospital I had started a new 'health' regime, not to lose weight but to simply be 'healthier' and 'fitter'. I began eating raw juices as advised by a 'healthy' nutrition app, and I started running regularly, using the Nike+ running application as my training guide. I thought that this lifestyle transformation would make me 'healthier', but when I saw my specialist consultant six months after leaving hospital (as well as many other specialists, including my acupuncturist), they were all pretty conclusive that the measures I had taken were so extreme that I had overworked my body far too hard following these 'health' apps, so much so, that it had most certainly contributed to - if not caused - this illness.

During my last days in hospital, now conscious and in recovery, I turned on my IPhone and my Nike+ running application 'nudged' me: "Rachael you've not run for three weeks", "Rachael [whilst showing me a list] here are all your 'friends' who have run (X) amount of miles since you last went for a run"; "Rachael, time for a run?" I was still bed-ridden, unable to walk or eat, and what did I feel? Guilt. Guilt that I had been inactive, guilt that my 'friends' online were maintaining their 'healthy' activities and I wasn't, guilt that my device was telling me so, and guilt that I had through misguided efforts, done this to myself. I immediately reflected and through sheer exasperation it dawned on me: 'there's something in this madness'. Four years later, almost to the day, here is my doctoral thesis.

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This thesis is dedicated to the memory of my incredible mother Helen Kent, your love and wisdom still guides me every day. This is for you.

CHAPTER ONE
INTRODUCTION

Place and space are no longer determined by geographical location, but by mobile, networked technologies, which mediate emotional and social interactions (Hjorth, 2011). Mobile communication technologies are changing the way we relate to others and how we experience our embodied selves (Goggin and Hjorth, 2014). This has changed and will continue to change the relationship between humans and their technical devices, as well as altering modes of communicating and interacting with one another. Elliot and Urry (2010: 3) argue that, "The rise of an intensively mobile society reshapes the self, its everyday activities, interpersonal relations with others as well as connections with the wider world". This 'anywhere anytime' discourse is often celebrated as emancipatory, as it is seen to generate mass connectivity and new communication practices. Communication technologies as facilitators for human interactions and expression are increasingly becoming a resource of special significance, as well as an object of research (Renninger and Shumar, 2002; De Maria, 2012).

Alongside the rise of mobile digital technologies, digital health technologies, devices and associated self-tracking applications have emerged. De Maria (2012: 1574) argues that "[Through the] miniaturisation and cost reduction of sensors [t]he number of physiological parameters that can currently be self-monitored by individuals is extensive and rapidly increasing". Like the discourses that surround Web 2.0, social media and the Internet more broadly, digital health and self-tracking technologies promise connectivity and increased knowledge about users' bodies, which enables 'health' optimisation (Wolf, 2010). Such technologies are celebrated for their role in 'revolutionising' healthcare and promise to optimise individual health through reflexive self-regulating practices. Many application-based tracking services like Nike Running Club or Map My Ride, and tracking sensors like the Garmin or Apple Watch are popular consumer devices. However, they are interestingly framed within policy and the media as having the capacities to transform behaviour and encourage 'healthy' lifestyles.

According to BCC Research, the global market for health self-monitoring technologies reached nearly $16.7 billion in 2016 (Health Self-Monitoring: Technologies and Global Markets, 2017). This market should grow at a compound annual growth rate (CAGR) of 28.3%, from $20.7 billion in 2017, to reach $71.9 billion by 2022 (*ibid*). Individual responsibility is the dominant neoliberal discourse promoting their use in healthcare policy (Beck and Beck-Gersheim, 2001), promoting lifestyle changes and 'healthy living' (Bunton and Nettleton, 1995). The privileging of 'good' health and lifestyle choices has been a central discourse to health promotion strategies for many decades (Crawford, 1977; Lupton, 2013a). The socio-economic, cultural and political shifts towards individualised health practices since 1948, combined with the nature of wireless digital mobile devices, related software, and the capacity of Web 2.0 platforms, have had implications for how bodies operate and function, as well as who is deemed responsible for health. The development of disease and ill health has long been viewed as an individual lack of self-discipline and intrinsic

moral failing (Brandt and Rozin, 1997; Mennel et al., 1992). 'Health', no longer conceptualised as binary to illness, has become representative of 'lifestyle correction' (Leichter, 1997: 359). Neoliberalism today, in response to the global financial crisis of 2008 has resulted in the resolution of many countries to "cut back (…) the welfare state and public spending (…) The issue today is not limited to a single country, as neoliberalism is an international, even global, phenomenon" (Crouch, 2011: viii). This global neoliberal rationality positions the citizen as a consumer, self-regulating to make the 'right' ethical decisions for the management of individual self-care. Therefore, this thesis understands neoliberalism through Davies (2015 6-7) conceptualisation that it is the,

> attempt to replace political judgement with economic evaluation (…) the central defining critique is its hostility to the ambiguity of political discourse, and a commitment to the explicitness and transparency of quantitative, economic indicators, of which the market price system is the model. Neoliberalism is the pursuit of the disenchantment of politics by economics.

Neoliberal political rationality advocated by state institutions, prioritises free market principles and "the dominance of public life by the giant corporation" (Crouch, 2011: viii) over the body, which advocates individual responsibility for health management is enacted through the adoption of consumer heath technologies. As Moore and Robinson (2016: 2776) observe, neoliberalism can be understood "as an affective regime exposing a risk of assumed subordination of bodies to technologies". As a mode of governance then, neoliberalism in this thesis is a political rationality which has become a pervasive tool to dictate and promote self-transformation of health (through the use of technology) as the continual lifestyle aim for individuals and citizens. These tensions and dualisms between the body and mind in being 'productive' to obtain an optimising state of health can be understood through the lens of 'new materialism' which "sets out to approach studies of life and knowledge in new ways that better reflect contemporary circumstances where survival is biological, and production is often virtual" (Moore, 2017: np) and conceives of the mind as having control over matter, or indeed culture can be considered as dominant over nature (Van der Tuin and Dolphijn, 2010: 156). Therefore, this thesis identifies with new materialism in understanding how the assemblage of humans and technology (data) has a liveliness, whereby all types of matter are an organising and agential experience (Moore and Robinson, 2016). As Moore and Robinson (2016: 2780) astutely identify, in a neoliberal society self-quantification and self-tracking,

> Transgresses the mind–body split; however, it also places the mind firmly in control. In this binary, the mind determines rational knowledge and quantification. The body (and 'spirit') is a passive object of this process, subject to being improved, whether they like it or not. The body has no agency of its own accord. It also creates contradictions because the Cartesian split is maintained even while recognising the inseparability of body and mind.

Through this perspective and recognition of how individuals attempt to manage their body and perceive it as malleable through the productive mind, this thesis explores and identifies how human subjectivity is structurally embodied (Braidotti, 2005/6: 158; Moore and Robinson, 2016). The self becomes 'managed', in "both her subjectivity and the outer world, (….) [reproducing] the

Cartesian trope of the subordination of (risky) body to (rational) mind" (Moore, 2017: np). In this thesis then, we examine the dominant role neoliberal ideology plays in the mind of individuals, advocating governance and control over the body through technological intervention. The capacity to transform is advocated through these political rationalities advocating that better health is only achievable through optimising and moulding the matter of the body through the dominant, powerful and controlling mind of the individual.

1.1 Methodology

Much literature has speculated on how users' engagement with self-tracking technologies fails to reflect on the process of using these technologies (Butt, 2012; Lupton, 2012, 2013; Shahini, 2012; Swan, 2012a, 2013; Quigley, 2013; Waltz, 2012), particularly in regard to how sharing self-tracking data can enable specific self-representations of health and constructions of health identities on social media, and can influence health behaviours offline. As Kristensen and Ruckenstein (2018: 3) state: "Neoliberal and corporate forces are at play in terms of self-tracking; self-monitoring practices are known to accelerate self-responsibilisation in terms of health and well-being". No research has yet explored how self-tracking technologies, and self-representations of health on social media, impact and influence health 'sharing' and practices, both online and offline. Furthermore, to enable a thorough investigation of how self-tracking mediations of identity construction work in practice, this thesis examines their use in the context of the norms and practices of social media and wider discourses of health responsibilisation and self-optimisation. This thesis, therefore, critically explores the use and influence of self-tracking technologies upon participants' self-representations within the context of Facebook and Instagram, as well as their influence on users through their offline health practices through three research questions:

1.1.1 Research Questions

(1) How do users of self-tracking technologies and social media self-represent their bodies and 'health'?
(2) How do these practices and self-representations enable ways of experiencing, understanding and viewing one's own body and 'health', in relation to others?
(3) Does the sharing of self-tracking data, images of diet, representations of the body and 'healthy practices' and behaviours lead to 'healthier' lifestyles or 'healthier' bodies?

1.1.2 Aims and objectives:

To achieve this, the project undertook empirical ethnographic research over a three to nine-month period with 14 participants who self-selected through a call for participants on Facebook and Instagram: seven women and seven men, between 26 and 49 years of age who regularly (daily/

weekly) share health and fitness-related content on Facebook and/or Instagram. These participants ranged from the everyday layperson, those who were dieting or training for marathons, to those dealing with illness or disease. The content shared came in the form of self-tracking data from applications (for example Nike+ or Strava) and devices (for example, Fitbit or Garmin Watch), gym or fitness selfies, or more general 'healthy' self-representations such as food photography.

1. Two semi-structured interviews (30-45 minutes each), one pre and one post the reflexive diary period.

2. Bi-monthly guided reflexive diary entries (6 entries in total) on different days of the week, over a period of three months.

3. Screenshots from content shared on Facebook and/or Instagram on the day the reflexive diary was completed (supplied by the participant in the reflexive diary).

4. Textual and thematic analysis of the language used in verbal (interviews) and written (online data and reflexive diaries), and screenshots of visual content shared (images and photographs).

It could be asked why it is necessary to examine such a variety and not focus on one method, device, or type of data capture in the analysis of self-representations on social media. However, there are a number of reasons for this choice. Although these types and modes of content differ hugely in their qualitative and quantitative capture, socio-technological affordance and representational states, they all enable participants to engage with the self-representation of their health, bodies, fitness and consumption practices. The blurring of health and lifestyle through political and cultural shifts in the last four to five decades means that lifestyle choices and behaviour (corrections) (Leichter, 1997) have become ideologically, discursively and culturally linked, and thus demonstrative of individual 'health' states. Social media and converged digital health and self-tracking technologies enable these representations of 'healthy' lifestyles. Furthermore, the triangulation of interviews, reflexive diaries, online data collection, examined through a textual and thematic analysis, provides a unique insight and critical long-term temporal reflection on these practices from the perspective of users, which is lacking in current research.

The analytical chapters (Four to Eight) examine how participants online decision-making processes and practices affected their offline health-related behaviours. The last two analytical chapters (Seven and Eight) focus on the textual and thematic analysis of the participants shared content, whilst incorporating findings from the textual and thematic analysis of the diaries and interviews from the first three analytical chapters (Four, Five and Six). Chapters Seven and Eight, therefore, present the textual analysis of the participants' curated and performed identities on social media, with consideration to community surveillance, and how this affected participants' (health-related) behaviours both online and offline. As of November 2016, Facebook had nearly 1.6 billion active users worldwide, while Instagram had 400 million (PEW Research Centre, 2016). Facebook and

Instagram were chosen for analysis due to their widespread popularity as well as their convergence with a variety of self-tracking applications and devices.

1.2 Self-Tracking Technologies

Self-tracking technologies and social media platforms enable a variety of ways to represent 'health'. This thesis positions the use of digital health technologies and social media sharing as all forms and modes of self-tracking. Surveillance of the body, health and fitness through these devices and platforms will be defined as "Self-tracking practices [that] are directed at regularly monitoring and recording, and often measuring elements of an individual's behaviours or bodily functions" (Lupton, 2016a: 2). Furthermore, this thesis recognises that these forms of surveillance are not innocent (Nakamura, 2015). In conceptualising self-surveillance through self-representation, within digital cultures we can understand it through participatory audiences, alongside the performance and presentation of the self through autobiographical health narratives (Cheng, 2000; Livingstone, 2008; Yee and Bailenson, 2007) as well as the capturing and sharing of data. Surveillance therefore, in this thesis, is a tool that is at times voluntarily embodied (self-surveillance), and at times used as a performance for the gaze of others (peer/community surveillance). Yet, in both cases it is used to exercise power. Self-surveillance through these devices and apps is presented as offering agency (Mann, 2005), which could be perceived as a rejection of state or top-down supervision. However, their voluntary use plays directly into the hands of their makers, who capitalise and profit from their use. As Kristensen and Ruckenstein (2018: 4) argue:

> Self-discovery through numbers promoted by the Quantified Self [and self-tracking practices] conforms to the model of the ideal neoliberal citizen: the self-optimising individual who voluntarily collects data on their own health and well-being, taking control of and regulating physiologies and everyday behaviour.

Human beings' desire to reflexively monitor aspects of our lives is not new, for example, keeping diaries (Rettberg, 2014). What makes self-tracking new in the context of this thesis is its digitisation and subsequent engagement with performativity on social media. Identity formation enabled through self-representation and online communication practices are increasingly mediated and reformed through digital modes enabled by this "paradigm of mobility" (Elliot and Urry, 2010: 7), the participatory and sharing affordances of Web 2.0, and in particular social media and online communities. Through the sharing of self-tracking data on social media, self-monitoring of the body is extended into the communities' gaze. This thesis is concerned with the practice of knowing one's body and 'health' through using these apps and devices to self-regulate the fit and idealised 'healthy' subject, as well as the promotion of such lifestyles through the comparative and competitive practices embedded within social media (Facebook and Instagram).

The emerging body of research around mobile devices, and in particular 'wearables' has attended to the significance of geo-locative devices and apps, and healthcare data repositories (Oudshoorn 2011; Mort et al., 2013). These practices are, however, no longer confined to volunteering individuals (with all the subjectifying self-regulatory responsibilisation this entails), but also employers and insurance companies, who advocate and even incentivise their use within corporate wellness schemes and healthcare package deals they offer to employees and customers (Till, 2018; Moore et al, 2018; Olson and Tilley, 2014). Much research has emerged, which has explored the use of self-tracking technologies in multiple settings, such as work and insurance schemes, schools, self-quantification/tracking communities, and leisure pursuits (Ajana, 2017, 2018; Goodyear et al., 2017; Ruffino, 2018; Moore et al., 2018; Moore, 2017; Till, 2018; Rettberg, 2014, 2018; Kristensen and Prigge, 2018; Spiller et al., 2018; Fotopoulou and O' Riordan, 2016; Lupton, 2014, 2016a). However, there is a paucity of research on the use of these technologies in representations of 'health' on social media, with particular relation to how these curated health identities affect users' health behaviours in their' daily lives.

1.3 The Role of Data

We leave traces of ourselves across various mobility systems, and in databases, which are commercially exploited through 'new modes of governmentality' (Elliott and Urry, 2010: 7). Neff and Nafus (2016: 189) argue that the "line between data and ourselves is where we choose to draw it". This thesis, however, argues that users do not always have this choice, nor that these distinctions are clear, especially with regards to data surveillance and privacy. Users may not be fully aware of the extent to which property rights own user data: "The precise articulation of property rights calibrates the control exercised over the flow of data. Intellectual property law and user agreements are key regulations that guarantee the controlled flow of BSD [Big Social Data] through a highly proprietary environment" (Cote, 2014: 138). The majority of self-tracking applications and data capture devices are access, not ownership models (Swan, 2012a). Therefore, the users of these applications often do not have full control of or 'own' the data they create, upload and share. Users voluntarily engage with these platforms and devices and willingly give up personal data. To unpack this in medical terms: "Data collected in doctors' offices are afforded one type of protection, but we do not have in place the legal frameworks that offer protections to similar data gathered from our smart phones, web searches, and digital devices" (Neff and Nafus, 2016: 180). This data uploaded onto digital health devices, applications and social media (Nike +, My Fitness Pal, Google, Facebook etc.), is collected and sold on to advertisers and marketers (Shahini, 2012). As Cote (2014) acknowledges, we may generate 'social data' but as soon as it enters the human and non-human assemblage, whether this be online or offline, the proprietor is no longer solely the user who generated it. Furthermore, as Moore (2017: np) conceives, "capitalism, as the current global political economic model within which we live, is becoming a system of increasingly empty selves, subject to unending capitalist social reproduction, where data simply confirms the order it has

already prefabricated". The seductive nature of these devices and technologies for lay people, is the promise of connectivity as well as health optimisation, community support and advice. However, as many of these platforms and applications are free to use, users freely give up personal data, which is at-times unknowingly mined. This data is frequently perceived by users as the ideological and practical 'trade-off' for using the 'free' service. The participants in this study frequently viewed data mining not as an invasion of their privacy, but rather as an acceptable practice that is an intricate part of their use of these technologies. These social media and self-tracking technologies enable a re-articulation and representation of the body and self through their use, and most interestingly, when sharing these behaviours on social media as a performance for the communities' gaze. Therefore, according to Moore (2017: np) the ideal self-tracker and quantified-selfer then is,

> (a) one who cognitively recognises that the mind and the machine must join forces to control physical movement and the affective experience or emotional responses to work [and health management], (b) someone who knows that their non-cognitive self is in constant need of self-improvement, and so, (c) is perpetually imperfect.

The participants using these digital health technologies and sharing data and health-related content on social media become both subjects and subjected; they are constructed and conceived. These new subjectivities, which emerge through self-tracking technologies and data sharing have been termed 'datafication' (Mayer-Schonberger and Cukier, 2013:30) and 'dataveillance' (van Dijck, 2014: 198). This reflects Hjorth's (2011) and Allen's (2008) observations that the everyday user may not reflect upon the role of such data collection in wider systemic and political terms. Jose van Dijck (2014: 198) defines 'dataism' as the "widespread belief in the objective quantification and potential tracking of all kinds of human behaviour and sociality through online media technologies". Immaterial and de-corporealised representations of the body restructure lived experience (Ajana, 2013; Sherman, 2016; Lupton, 2014; Moore and Robinson, 2016; Moore, 2017), for, as Kristensen and Prigge (2018: 44) highlight: "the subject doing the measuring, is also 'delivering' that material to be measured, interpreting the data and acting on these", thus contributing to a continually evolving, involved and expanding relationship with technology and how it is experienced. Therefore, this construction of a 'data self' *(ibid),* entails a new conception of lived experience, where the self is known through data, and the data simultaneously informs the self. This thesis however, is concerned not only with the quantified representations of the body and health, but also with other health-related, at times qualitative forms of representations, which I have previously referred to as the 'health self' (Kent, 2018: 62). The 'health self' encompasses and refers to many different types of bodily, health and fitness representations enabled through the convergence of self-tracking apps, devices and social media.

1.4 Making Sense of our Bodies through 'Technologies of the Self'

Self-tracking and digital health sensors, computers, wearables and other forms of new technology extend human powers into digitally quantifiable (Lupton, 2012b) as well as qualitative formats. At the same time, they demonstrate the shift from a public welfare state responsibility for health

towards individualised and self-responsibilising practices of health self-care within neoliberal societies (Aguirre et al., 2006; Crouch, 2011; Davies 2015, 2016; Harvey, 2005; Hey, 2005; Lupton, 2013; Tritter, 2009). As Cederstrom and Spicer (2015: 5) argue, wellness is now not a choice but a "moral obligation", so too can be understood of health optimisation in neoliberal societies. Many digital health technologies hold within their capacities a 'one size fits all' model of health management and self-care. As Buyx and Prainsack (2012: 82) expand: "research in epigenetics has shown that some environmental influences, such as the consumption of particular foods, can change the way genes are switched on or off, leading to a situation where the social is effectively folded into the genetic and vice versa". This means that it is increasingly difficult to differentiate between genetic, non-genetic, and lifestyle influences upon individual health, which ensures that "against this backdrop of lack of knowledge and empirical research, the notion of what we can be held accountable for, is clearly a moving target" *(ibid:* 82). This standardised 'moving target' of health improvement raises socio-cultural issues in the context of health management and self-care. Most significantly, these technologies of the body tell us how to live: "At the heart of the QS [Quantified Self and self-tracking] movement is, in fact a desire for 'control' (Ajana, 2017: 5). Visualisations provided by activity recorded on the device provide gratification for their users, while incomplete recordings or empty graphs generate frustration and guilt: "at stake are the very lenses we use to see ourselves and others" (Neff and Nafus, 2016: 11). Making sense of one's own body and health through these processes shifts definitions of health and ill health, activity and inaction, presentation and concealment, surveillance and privacy.

Knowledge is a social product and "technology has never been closer to the human body and mind" (Kristensen and Prigge, 2018: 44). Digital health devices and technologies "figure and produce citizens as individual entrepreneurs and consumers whose moral autonomy is measured by their capacity for 'self-care'" (Brown, 2005: 694). In a neoliberal society, the intangible definition of good 'health' means health has become ascribed to the individual, in their self-maintenance through education and prevention, self-discipline, and now self-monitoring through self-quantifying and digital health devices (Swan, 2012a). This thesis therefore, explores the relationship between power and knowledge, and how it is diffused within politicised practices advocated and enforced within self-tracking technologies, and self-representation online. It also explores how 'governmentality' (Foucault, 1979, 1997b: 67), the regulatory activity that shapes the self as well as public beliefs and behaviours towards health maintenance and self-management, influences health practices, the self-management of health and the 'government of the soul' (Rose, 1999: 11). Lupton (2006: 94-95) argues that Foucault and his derivatives often "neglect examination of the ways that hegemonic medical discourses and practices are variously taken up, negotiated or transformed by members of the lay population in their quest to maximise their health status and avoid physical distress and pain". Therefore, this thesis addresses this gap in research through an empirical ethnographic study of users' experiences of self-tracking technologies and their relationship with self-representation and identity. This empirical research is significant, as it renders the arguments of Foucault (and his derivatives) less abstract by providing valuable insights into how lay people

negotiate and navigate dominant neoliberal and medical discourses in their everyday lives, through an examination of individual practices and strategies for the management of health. This thesis, therefore, examines the increasing neoliberal political, socio-economic and cultural shifts which "promotes a view of people whose ability to prosper is unrelated to traditional features of survival under capitalist conditions, such as an income and the ability to feed bodies" (Moore, 2017: np). Rather, we see promotion of the move towards individual and self-responsibilising health practices in enabling optimal bodies, afforded and encouraged by self-tracking technologies, the corporations that market their revolutionising potentials and the state. These applications "speak to the very core pathology of (…) disease; if I do this, then I have to do that" (Gregory, 2014: 8). This thesis will undertake a critical analysis of how users mediate relationships between these technologies and their health practices, with self-tracking technologies being considered a lifestyle tool, to aid and enable health decisions. Wellness has become an ideology, as Cederstrom and Spicer (2015) argue, as has the prioritisation with health or certain representations of 'healthy' lifestyles and behaviours. These comparative and competitive practices can be understood as what Strava (2015, in Lupton, 2016a: 24) terms 'social fitness'. This thesis explores how these technologies influence and enable certain self-representations of health and health identity, and how such practices of self-representation within online communities (Facebook and Instagram), enable ways of experiencing and viewing one's own body and health, in relation to others.

These 'technologies of the self' (Foucault, 1982: 16-49) can be understood as enabling self-care, which Nettleton and Burrows (2003: 165) have termed 'e-scaped medicine', whereby self-tracking technologies and social media platforms enable certain ways of acquiring knowledge about oneself: "the very act of self-tracking, or positioning oneself as a self-tracker, is already a performance of a certain type of subject: the entrepreneurial, self-optimising subject" (Lupton, 2014a: No Page). Rose (1996: 135) understands this through three ways of relating to oneself: epistemologically (knowing yourself), despotically (mastering yourself), and attentively (caring for yourself). Therefore, we can understand self-tracking technologies as an 'attentive' 'technology of the self'. However, as Heyes (1996) recognises, this needs to be understood within the context of politicised practices. Furthermore, these technologies encompass all aspects of relating to oneself, and blur the boundaries between the three relational parameters outlined above. This problematises health practices, in the sense that individuals, when employing a self-tracking technology to aid, enable or encourage particular health practices, are arguably replacing or building upon the epistemologically and despotically inherent known self, with a technological device to care for the self. Furthermore, these devices hold within their own capacities the drivers, design and architecture for knowing or relating to and caring for the self.

1.5 Bio-Politics

Bio-politics (Foucault, 1976) refers to techniques of governance, which have extended sovereign power and political control over all major processes of human social and biological processes. Bio-

politics references "how our bodies are being governed and disciplined by new social structures and systems of measurement" (Ajana, 2013: 5), which operate at individual, technological and state levels. Self-tracking technologies extend the reductionist challenges already identified within older systems of body measurement [bio-metrics] (Ajana, 2012) and the inherently bio-political differentiation of bodies: a subjective othering generated by limiting the parameters captured and framed by corporations and the state in their objective surveillance of individuals and populations. Bio-politics therefore identifies the technology, and the individual user as agents, co-existing and in some cases co-evolving together. Whereas bio-metrics have become shadowed by a dystopian surveillant discourse (Ajana, 2012, 2013; Magnet, 2011), digital health and self-tracking technologies through health promotion strategies advocated by the neoliberal states and the corporations who market their benefits have until very recently evaded such critique. Indeed, they have primarily been promoted as revolutionary tools for health betterment. Lupton (2013f: 14) articulates this as a "data utopian discourse on the possibilities and potential of big data, metricisation and algorithmic calculation for healthcare". Advocacy for the use of digital health technologies is also increasingly evident in international policy (Rich and Miah, 2017), which are seen to provide "cost-effective preventative solutions to rising levels of obesity, sedentary behaviour and associated non-communicable diseases" (Goodyear et al., 2017: 1-2; HM Government, 2015; World Health Organisation [WHO], 2011). The promotion of such digital health technologies through such health promotion campaigns often disregards the social, cultural and political dimensions of their use (Lupton, 2014). In particular, how individual responsibility, management and enactment of 'healthy' lifestyles become entwined with consumer culture and free market neoliberal rationalities. Poor health or a lack of health management means not only a threat to individual health but also a threat to society, "shifting the focus from an unhealthy activity to an unhealthy individual", therefore, "when health becomes an ideology, the failure to conform becomes a stigma" (Cederstrom and Spicer, 2015: 4). In this regard, the "promise of individuals 'taking control' may very well be disguised as empowerment" (Neff and Nafus, 2016: 57). This research does not examine practices of self-tracking in a celebratory framework. Neff and Nafus *(ibid)* for example, argue that these practices are enabling enhanced knowledge of the self and body. However, this thesis critically examines, through empirical data of self-tracking users, how these practices can be identified more as an unknown in what they provide for their users (Dyer, 2016). It will critique these promised discourses and will challenge assumptions of surveillance. It will ask what these "new intimacies of surveillance" (Bersen, 2015: 40) and new technological interrogations of the body actually provide the user with. This reflexive and cyclical process challenges the notion of the self, as "a bounded entity, with a fixed and stable ontology" (Kristensen and Ruckenstein, 2018: 4). Rather, new forms of visualisation and communication emerge from these identity formations (Ruckenstein, 2017), through the unknown (Dyer, 2016) and "the interplay between self-tracking practices and wider healthcare discourses and emergent strategies" (Ajana, 2017: 2). Kristensen and Ruckenstein (2018: 3-4) understand these human-technology relationships as forming a "'laboratory of the self' framing self-tracking and associated human-technology interactions as metrics-enhanced self-experimentation and discovery". Self-tracking was once framed through academic literature and the corporations who promoted them as

enabling 'healthier' bodies, with the mind-body relational sphere being frequently omitted in earlier analyses. More recent work has attended to this continuum. For example, Pink and Fors (2017: 2) consider self-tracking technologies to mediate "people's tacit ways of being in the world", paying attention to the intimate forged relational modalities between technology, the body and the mind. Moore and Robinson (2016) argue how quantified self practices and self-tracking technologies rely upon the ontological premise of Cartesian dualism with the mind being dominant over the body. Therefore, framing and understanding self-tracking practices as a 'laboratory of the self' provides a holistic examination of these processes of "objectification and subjectification, framing new possibilities as well as imperatives for self-exploration and self-improvement" (Kristensen and Ruckenstein, 2018: 4). These movements are:

> often seen as a key illustration of a neoliberal attitude towards the self and its governance, given the way this movement encourages individuals to become rational entrepreneurs of themselves and embrace its metric culture of self-improvement, whose intrinsic ideology is echoed in [QS co-founder Kevin] Kelly's argument 'unless something can be measured it cannot be improved' (Ajana, 2017: 4).

The use of self-tracking technologies, therefore, leads to the metrification of 'health' (Ajana, Metric Culture: Ontologies of Self-Tracking Practices, 2018), as well as the curation of 'health(*y*)' identities through these metrics' 'share-ability' on social media. The role of data and these technologies in shaping our understandings of our bodies and our 'health', highlights the discourses of self-governance and self-discipline that exist within cultures of self-tracking. Additionally, these movements and cultures purvey that the characteristics of agility, continual transformation and change are now a pervasive part of being in neoliberal society (Moore, 2017) and a society of control (Deleuze, 1992). This thesis illustrates self-tracking and social media user's imperative to perform, subjectify, observe and objectify their bodies (Moore and Robinson, 2016) through self-regultory adherance to the bio-political parameters advocated by neoliberal rationalities (to self-improve) and these health technologies. This deserves further attention, especially when considering the pervasive role these technologies play in users' everyday lives. This thesis attends to this gap in the research and explores how these technologies teach users to conform to a model of 'health', which advocates that with or without technology, better 'health' is only achievable through individual biopolitical governance via self-surveillance and self-regulation.

1.6 Self-Representation and Social Media

This thesis examines participants' use of self-tracking and social media platforms as ethnographic sites, which enables a critical analysis of subjects' self-representations. Practices of using social media therefore "requires a critical approach to context creation; (…) participation in social networking entails both the production of one's own self-representation and the acceptance that one may be represented by others" (Thumin, 2012: 149). This thesis therefore, defines and

conceptualises social media platforms, in particular Facebook and Instagram, as performative spheres for the construction of identity including the social, cultural and psychological aspects of behaviour, through communication technologies (Jakala and Berki, 2004). These ethnographic sites and this empirical analysis enables interrogation of the online representations, offline realities and lived experiences of these individuals. However, it must be highlighted that the ethnography does not attend to analysis of these platforms (Facebook and Instagram) of self-representation themselves. Rather, the focus centres on the participants' use and engagement with them for their own representational and surveillant needs. The online data captured (screenshots) was supplied by the participants' of their self-tracked or health-related content shared on Facebook and Instagram. This thesis provides a unique contribution to the expanding field of self-tracking technologies, through its analysis of participants' processes and practices related to using these technologies to represent their health identities, and how such performances, under the online communities' gaze, affect their health behaviours and practices offline. As Kristensen and Ruckenstein (2018: 2) articulate: "These collaborations (…) mediate and modify human presence and perception, behaviour and decision making", enabling participants to generate new ways of seeing themselves through such self-representational performances on social media. This further shapes "self-understanding and self-expression, suggesting a vision of technology that in its concrete materiality influences not only selves, bodies and socialities but also communication and learning" *(ibid:* 2). Therefore, this critical analysis explores how these technologies mediate participants' perceptions of themselves and their personal actions. Once 'health'-related content is shared, this analysis then examines how participants' conceptualise 'health'-related experience, individually and through the gaze of others watching in their social media communities.

Self-representation, in a neoliberal age, if often achieved through individualising practices and a sharing of statistics or lifestyles. This thesis defines the self-representation practices enabled through self-tracking and social media platforms through the lens of Goffman's (1959) work, which identifies self-presentation as a performance. When we historicise the internet, we can begin with arguments that it holds within its processes and practices the commercial exploitation of leisure as a means for controlling personal and collective identity (Wallace, 1999; Jakala and Berki, 2004). Whereas before writers published historical narratives, and constructed cultural and social histories, with the affordances of web 2.0 and in particular social media, users are able to individually construct their own. Instagram describes itself as, "a community of more than 800 million who capture and share the world's moments on the service" ('About', 2018). With Facebook similarly identifying itself as a platform which, "Give[s] people the power to build community and bring the world closer together" ('About', 2018). Maslow (1987) argues that being part of a group or community fulfils part of a basic human need to belong, identifying why individuals may feel a desire to join and maintain a presence and self-representation within social networks and online communities. As Beato (2012: No Page) highlights, "we treat even our most mundane lunches as if they were corpses at a crime scene". We now speak with machines through representational mediations of self. This thesis thus interrogates the sharing and self-representational phenomena afforded by self-tracking technologies, Facebook and Instagram.

1.7 Chapter Outline

The final section of this introductory chapter will give a brief summary of the chapters in this thesis. Firstly, the Critical Review of the Literature (Chapter Two) provides a historical contextualisation of public health discourses from the post World War Two period, to today's individualising neoliberal practices, which have become problematically advocated and embedded through consumer self-tracking devices and health representations enabled through the use of social media. This chapter is split into three sections, 'Part One: From the Welfare State to Individualised Health Self-Care', Part Two: 'Self-Tracking, Self-Quantification and Surveillance' and 'Part Three: Self-Presentation and Social Media'.

The Research Methodology (Chapter Three), discusses in detail the strengths and limitations of the methodological approaches of this thesis. Online data collection, guided reflexive diaries and semi-structured interviews, are triangulated with textual and thematic analysis of verbal (interviews) and written (online data and reflexive diaries) content, as well as screenshots of visual content (images and photographs) shared by the participants on Facebook and Instagram. This chapter explores how the unique triangulation of these methodologies over the three to nine-month research period provided unanticipated reflexive engagement from the participants. In particular, the completion of the reflexive diary, contextualised through the semi-structured interviews, encouraged the participants to engage with their own sharing practices and health-related behaviours in a way that unearthed new 'findings' and personal revelations for them, as well as for the researcher. Therefore, a strength of these methodologies, and of this thesis, is the temporal, reflexive and influential nature of the methodologies, participants' responses and thus the empirical research findings.

This first analytical Chapter (Four) 'Health Identity and Methodological Influences' draws on analysis of the empirical data to examine what health meant to the research participants, how this informed the ways in which they perceived and constructed health identities on social media, and how the research methodologies encouraged further engagement and reflection about their health management, perceptions of their bodies' capacities, and their sharing practices. This chapter also provides analytical contextualisation of how the methodological approach of this thesis additionally contributed to participants' understandings of 'health'.

The second analytical Chapter (Five) 'Self-Surveillance and Self-Tracking' explores the dominant themes associated with self-surveillance and self-tracking, examining themes of self-betterment and self-optimisation, pride in self-surveillance and self-discipline, input versus output discourses, health gamification, the technological issues related to self-tracking, self-surveillance and body image, and lastly how health and lifestyle affect health behaviours.

The third analytical Chapter (Six) 'Self-Regulation and The Moralism of Health' examines participants' 'health', fitness and lifestyle management. These are analysed through neoliberal socio-economic, political and moral self-disciplinary discourses, which position the human being and body as a subject to be worked upon. The overarching dominant discourse identified throughout this critical textual analysis is the regulation of the self and body through self-tracking technologies.

The fourth analytical Chapter (Seven) 'Motivations to Share and Community Surveillance' explores the participants' motivations for sharing health and fitness-related content on social media (Facebook and Instagram) and the influence of community surveillance and feedback. This is achieved through a detailed textual and thematic analysis of the participants' screenshots of their shared online content, diary reflections and interview discussions. This chapter explores and challenges the discourses that surround community practices on social media, including considerations of voyeurism, sharing and connectivity achieved through, for and with the help of the audience. Furthermore, it explores how surveillance of and by others influenced the participants' practices of self-presentation.

The final analytical Chapter (Eight) 'Self-Representing the Idealised 'Healthy' Self, Social Media Etiquettes and Digital Detoxing', explores the many socio-technological tools, ideological framings and narratives the participants' adopted in an attempt to self-represent their idealised healthy self and body on Facebook and Instagram. This is achieved through a detailed textual and thematic analysis of the participants' screenshots of their shared online content, diary reflections and interview discussions. This chapter also examines the participants' shifting sharing and self-representational practices over time, with consideration of social media addiction and digital detoxing.

The concluding Chapter (Nine) summarises the research findings whilst presenting how this thesis provides a unique contribution to the expanding literature on self-tracking technologies and social media, through its examination of participants' processes and practices related to using these technologies to represent their health identity, and their effects on their' health behaviours and practices offline. This chapter concludes by discussing the limitations of the thesis, whilst identifying areas for future research, particularly in regard to methodological approaches, notably the combination of digital and pre-digital ethnography.

CHAPTER TWO
A CRITICAL REVIEW OF THE LITERATURE

This chapter provides a historical contextualisation of public health discourses, from the post World War Two period, to today's individualising neoliberal practices, which have become deeply embedded within society, via the use of consumer self-tracking devices and health representations enabled on social media. To examine these shifts this chapter is split into three sections; Part One: 'From the Welfare State to Individualised Health Self-Care', Part Two 'Self-Tracking, Self-Quantification and Surveillance', and lastly, Part Three: 'Self-Presentation and Social Media'. The first part provides a historical contextualisation of these social, cultural and political shifts through the birth of neoliberalism, 'healthism' and lastly digital self-care, identifying how self-responsibilising and individualising health practices are problematically advocated through consumer self-tracking and digital health devices. Part Two 'examines in more detail how users are adopting and using these self-tracking technologies to learn about their bodies and to self-manage health. It analyses the problematic elements of these consumer devices, as they present themselves as advocating better 'health' outcomes via their use. It briefly introduces perspectives around how the technological affordances of self-tracking technologies 'nudge' the user towards particular outcomes, and the potential ethical implications of this. This section also explores individual health behaviours in the context of consumer self-tracking technologies and the use of social media to represent certain health identities. Within this context, this section will examine the issues and implications of self-surveillance, wider surveillance, data and privacy through the use of these technologies, in particular capturing health-related content and data. This third and final part examines theories of self-representation, through the perspective of the social media performance of 'health' identities (Goffman, 1959). Socio-technological influences on social media platforms are examined in the representation and curation of health identities, whilst recognising how these commercial platforms commodify sociality and the self. The final section explores self and peer surveillance within online communities, whilst considering the problematic issue of the invasion of users' privacy through data mining.

2.1 Part One: From the Welfare State to Individualised Health Self-Care

To provide a context for how the use of these technologies and self-responsibilising practices have become so pervasive in neoliberal societies, the first part of this chapter examines broadly the four political, cultural and social shifts in health practice and health promotion from 1948 to today. The first phase extended from the birth of the British National Health Service (1948) as guarantor for the health of the population, to the second phase in the 1970s and early 1980s, characterised by health promotion practices of 'healthism' (Crawford, 1980) and associated lifestyle corrections (Leichter, 1997). These health responsibilising practices were promoted in the wake of social unrest, and a shift from classic to neoliberal political rationalities during this period. The third phase marked a return to social epidemiological acknowledgements of the socio-economic impacts upon health and disease in the 1990s. More recently, the fourth phase of health practices and

promotion identifies a return to individualised health responsibilising practices of self-care, further enabled by self-tracking and consumer devices and health promotion strategies advocated through discursive political structures in neoliberal societies.

With the establishment of the National Health Service (NHS) in 1948, the state became responsible for population health and well-being. The state became "both orchestrator and guarantor of the well-being of society and those who inhabited it" (Rose, 2007: 91). Healthcare policy and discourse at this time invoked feelings of inclusion, unity and support. Doctors and medical staff in the National Health Service were seen as the authority of 'medical prestige' and health expertise in the eyes of the public (Seale, 2003). Perspectives on health promotion and public health, however, began to change in line with the social movements of the 1960s and 1970s, when social justice and issues of inequality came more to the forefront of social consciousness (Brandt and Rozin, 1997). These cultural movements became part of a rebellion against 'the establishment' and British society's imposed social 'norms' and responsibilities. In turn, a new discourse concerned with resistance to institutional state power circulated throughout British culture. The radical left argued for freedom of 'governance' (Rose, 2007). This in turn led to the development of a new ideological approach within state support; an advanced right-libertarian government (Brandt and Rozin, 1997). This 'liberalisation' was not concerned with a cultural liberation, but with liberating the government from historically embedded responsibilities and institutional concerns of preventing social inequalities, which included public health through the National Health Service. Foucault (1984) identifies the liberal movement as demonstrating a distinction between state and society. Liberalism differs from state interests in that it assumes that "human behaviour should be governed (…) in the interests of society understood as a realm external to the state" (Rose, 2007: 84). This distanced responsibility was achieved by "devolving those quasi-autonomous entities that would be governed by distance [...] and other technologies that were both autonomising and responsibilising" *(ibid:* 91). Therefore, this ideological push by right-libertarians for the 'creation of freedom' was integral to neoliberal strategies of "governing the soul" *(ibid:* 90). The governance of the soul was what Foucault (1979, 1997b: 67) termed 'governmentality'; a complex political rationality, formed and enforced not through a single body, but rather through the state, institutions and corporations. This social 'liberation' and drive for freedom, problematically encouraged the birth of political neoliberalism, which advocates that the self must be governed individually, not solely in the interests of the state, but for individuals and society as a whole *(ibid).* The neoliberal subject was born: a self-responsibilising, entrepreneurial individual 'freed' from state governance, who in turn embodies the self-regulatory 'government of the soul' (Rose, 1999: 11), to maintain and manage individual 'health'.

2.1.1. The Birth of Neoliberalism

The socio-economic, cultural and political shifts towards neoliberalism in the 1960s, 1970s and 1980s prioritised "open, competitive and unregulated markets, liberated from all forms of state interference" (Brenner and Theodore, 2002: 2). Neoliberal political rationalities over public health

were further cemented during the economic and unemployment crises of the 1970s and early 1980s (Harvey, 2005). For example, The Black Report (1980) identified that ill-health and death are unequally distributed in the UK. These findings highlighted that social inequalities had been widening rather than diminishing since the birth of the National Health Service in 1948. This was not due to failings within the NHS itself, but rather to social inequalities influencing health (income, education, housing, diet, employment, and conditions at work) (Gray, 1982). The Black Report was virtually disregarded by the then Secretary of State for Social Services Patrick Jenkin, with the Thatcher government reframing the achievement of 'good health' through a libertarian discourse of individual 'choice' *(ibid).* The state wanted to disentangle itself from economic and social activity and mounted a view of itself as an enabler rather than a tool for intervention in economic and social affairs (Crouch, 2011; Davies 2015, 2016; Harvey, 2005). In turn, free market principles of 'neoliberalism' and individualisation were encouraged, 'freeing' the citizen from the 'dead hand' of the state *(ibid).*

The new public health discourse of the 1970s and 1980s operated under neoliberal values of putting the economy before the needs of its people (Brown, 2006). Yet, this liberation from state intrusion actually involves "coercive, disciplinary forms of state intervention in order to impose market rule upon all aspects of social life" (Aguirre, Eick and Reese, 2006: 1). This process created a shift from classic liberal values of the welfare state as a supporter and facilitator of public health, towards neoliberal practices of the privatisation of public institutions and the self; a promotion of individualisation and self-care (Crouch, 2011; Davies 2015, 2016 Harvey, 2005). Within the advanced (neo) liberal government, "subjects obliged to be free were required to conduct themselves responsibly to account for their own lives" (Rose, 2007: 90). The new, distanced means of regulating ensured that responsibility to enforce institutional structures within business and public behaviours encouraged an 'individualising culture' in contemporary Britain. In turn, public health shifted from a state responsibility towards an individualised responsibility of 'health' (Hey, 2005). This legitimised governmental inaction and ensured the circulation of a political discourse, which re-configures the human being as "cast in terms of market rationality" (Brown, 2003: 9), whereby the citizen is situated as no longer under care of the state in the prevention of social inequalities, but as a subject to be consumed and profited from.

2.1.2 The Birth of 'Healthism'

Alongside these political and socio-economic shifts, the development of clinical research and nutritional science in the 1970s and 1980s (Brandt, 1997; Mennel et al., 1992) was associated with an increase in the British press coverage of 'health issues' (Williams and Miller, 1998). A heightened awareness of the science of 'health' developed, which reconsidered its social impact, rather than just focusing on 'bad' food consumption in relation to the development of ill health. The study of epidemics continued, including both the search for causes and patterns of disease. The medical gaze began to focus upon disease and the events surrounding its development (Foucault, 1979). This contributed to a state and media encouraged 'health' agenda within Britain (King and

Watson, 2005), and further encouraged the 'fitness movement', which refers to the boom in physical exercise in the 1970s and 1980s (Brandt, 1997). This meant that 'fitness' became integrated into the lifestyles of the British public. Crawford (1980) theorised this development as 'healthism', which discursively prioritises the maintenance of good 'health', over all other aspects of lifestyle. Good living, in healthism, is dependent upon individuals making healthy choices (Ayo 2012: 103; Crawford, 1980: 378).

The public health promotions of the 1970s and 1980s were concerned with discourses of lifestyle correction and health moralism, privileging what was determined 'good health' over other priorities in life, without taking into consideration "the social, cultural and economic underpinnings that influenced patterns of illness and disease across the community" (Lupton, 2013e: 4). Such restructuring and dismantling of social and economic spheres "figures and produces citizens as individual entrepreneurs and consumers whose moral autonomy is measured by their capacity for 'self-care'" (Brown, 2006: 694). Through the concept of neoliberal 'governmentality' (Foucault, 1979, 1997b: 67), the regulatory activity both of the self and external influences was advocated by healthcare policy and the media, shaping public beliefs and behaviours towards individual regulation and self-maintenance. This 'privileging' of 'good' health and lifestyle choice was central to health promotion activities with "victim-blaming' tendencies of health promotion and preventative medicine despite general awareness of the social and environmental determinants of disease in medicine" (Lupton, 2013e: 4). Sufferers and 'victims' of ill health and disease therefore, would be positioned by healthcare promotion and policy as being irresponsible, and would subsequently be blamed for poor health management. As Lorig and Holman (2003: 1) observe: "Whether one is engaging in a health promoting activity such as exercise or is living with a chronic disease such as asthma, he or she is responsible for day-to-day management". A refusal to engage in healthy behaviours or to actively manage ill health, according to Lorig and Holman (*ibid*), reflects a poor 'management style':

> Unless one is totally ignorant of healthful behaviors it is impossible not to manage one's health. The only question is how one manages. The issue of self-management is especially important for those with chronic disease, where only the patient can be responsible for his or her day-to-day care over the length of the illness. For most of these people, self-management is a lifetime task.

'Good' health and a healthy body were no longer simply considered in opposition to ill health but were demonstrative of economic and social factors and self-discipline, embedding ill health within a moral discourse. This thesis and its research findings extend Lorig and Holman's *(ibid)* argument, whereby it is not just sufferers of chronic conditions but the everyday layperson, who now embody this dominant discourse. Health self-management, when not enacted effectively, becomes tied to personal blame (and shame) over lack of personal responsibility and poor health management. Unlike classic liberalism, this extends to individual behaviour, whereby neoliberalism ensures individual conduct is discursively prescribed towards citizens 'enacting' behaviours in a consumerist capitalist state (Brown, 2005). Brandt and Rozin (1997) argue that this social change

was further contributed to by the rise of clinical research, which led to concrete conclusions about diet and exercise and their relationship to the prevention of disease and cancer.

New public health campaigns in the 1990s had a returned focus on social epidemiology, which identifies how social groups, taken as a whole, could be considered 'healthy' or 'unhealthy' (Raphael, 2008, 2011). Public health policy at this time was centred upon moving away from individual responsibilities, to identifying the social determinants of health *(ibid).* This notion that the social and economic conditions in which people live are expressed within the body was seen to identify "intimate links between our bodies and the body politic" (Krieger, 2001: 693). Under a neoliberal political rationality, the social epidemiology public health discourse placed social groupings as: "part of the government of the self in neoliberal contexts, thus drawing attention away from the role of state agencies in supporting health promotions and alleviating the reasons for people's ill health" (Lupton, 2013e: 4). Social epidemiological findings and subsequent social discourses ensured that the public understood ill health and disease as being associated with socioeconomic disadvantage.

2.1.3 The Recession and the National Health Service

The global financial crisis of 2008 and subsequent austerity measures meant that the priority of the British government was to govern health through the individual actions of citizens (De Vogli, 2011), through 'better health outcomes' and 'lower health costs' (Dentzer, 2013: 202). This prompted questions related to how to better allocate resources fairly and efficiently, drawing on individualised practices as solutions to these shortages. The question thus emerged as to "whether individual (or personal) responsibility should be used as a criterion to allocate – or ration – healthcare resources" (Buyx and Prainsack, 2012: 79). This question was considered to redefine the "relationship between the state as the guarantor of the health and well-being of its citizens and the state as the promoter of markets and consumerism" (Tritter, 2009: 279). Health promotion strategies that prioritise 'individual patient decision making' *(ibid),* ensure that individuals become 'managers' of their own healthcare (Green and Hubbard, 2012). In the last decade, we see these neoliberal rationalities more pervasive than ever; "neoliberalism is emerging from the financial collapse more politically powerful than ever" (Crouch, 2011: viii). Many governments' role in addressing public health issues, in particular the living conditions of those 'at risk' from ill health and disease, is now "diverted to funding marketing campaigns exhorting people to change their behaviour or seeking medical solution to public health problems" (Lupton, 2013e: 4). This individual governance and health maximisation can be identified through an international and even global approach to such neoliberal government health policy. These sections have explored the changing institutional structures that have impacted upon public health promotion strategies and practices, shifting public notions of 'health' from a state support to be individually managed. This next section will explore the next phase: the development and rise in the adoption of digital health technologies.

2.1.4 Health Promotion Strategies: Digital Self-Care

In the neoliberal political systems that currently dominate many developed countries (such as the USA, the UK, Australia, New Zealand, and Canada), the politically active approach of public health tends to be disregarded, with preference for a focus on individual personal responsibility for managing health behaviours, regardless of lifestyle factors (Ayo, 2011; Crouch, 2011, Davies, 2015, 2016; Raphael, 2011; Lupton, 2013). Such developments mean that governments are driving citizen engagement with digital technologies as a part of health responsibility and self-care (Mort et al., 2009; Oudshoorn, 2011), illuminating Davies (2015: 42) recognition that "reconfiguring institutions to resemble markets is a hallmark of neoliberal government". Web 2.0 enables far more participation over Web 1.0 capabilities, ensuring we can increasingly collect greater amounts of data on many aspects of our bodies (Swan, 2012b). Geo-location, emotion, and physical function can be collected, analysed, and shared. Such technologies are celebrated as 'revolutionising' healthcare and promise to optimise individual health through reflexive self-regulating practices. As mentioned briefly in the introductory chapter, according to BCC Research, the global market for health self-monitoring technologies reached nearly $16.7 billion in 2016, $20.7 billion in 2017 and is projected to reach $71.9 billion by 2022 (Health Self-Monitoring: Technologies and Global Markets, 2017). So how do health promoters advocate digital health technologies for personal health responsibility?

Digital health promotion, through digital self-care, can be identified as the latest stage in this enactment of health promotion ideology and health practices over the last four decades. Public health campaigns advocate the use of digital health technologies by promoting their possibilities for maintaining and monitoring individual health (Swan, 2012a; Topol, 2012). The new active consumer of health is now expected to take personal responsibility for maintaining individual care of the self. Non-commodified public spheres, like healthcare, are being replaced by commercial systems through the adoption of digital health devices (Swan, 2012a), which serve to monitor and encourage self-regulatory monitoring behaviours. This dominant discourse does not fully take into consideration (lay) people who cannot access or afford such technologies or those who are not literate in using them.

In individualised, privatised terms, the responsibility for maintaining 'health' has now become internalised, and self-regulatory. Modes of monitoring consumption are advocated and encouraged through these devices: "Care of the self is not an indulgence, or a distraction from the affairs of the polis, but rather a necessary condition of effective citizenship and relationships" (Heyes, 2006: 139). As a part of this individual management of self-care, reflexivity is paramount to ensure successful monitoring of individual health regulation. Such responsibility towards individual self-care is enacted for example, through self-diagnosis enabled via online search engines; for example, four out of five Internet users look online for health information with three billion health-related questions being entered every month, and one in two people believing that the search results reflect the true likelihood of illness (Palmer, 2012). Prainsack (2013: 112) identifies that "though

web-based tools in health are no longer limited to a narrow elite, this does not mean that everyone will use them. As the groups of users are widening and diversifying, so are the reasons for non-use". An abundance of health information available online or through digital health tools, even without access and literacy obstacles, does not necessarily mean that patients, citizens and users will access this information. As Husain and Spence (2015: 2). expand, "we shouldn't confuse more healthcare with better healthcare. One of our roles as doctors is not just about treating the sick but also about protecting the well and protecting peoples sense of wellbeing". Furthermore, many health and fitness applications lack "rigorous clinical evidence to demonstrate they can actually improve health outcomes" *(ibid).* Such a view problematises individuals' increased usage of these health devices, for guidance, support and health (mis)information.

We can identify two opposing lines of argument in relation to digital health applications promoted within health promotion strategies. On the one hand, it could be considered that they help or enable people to "correlate personal decisions with health outcomes" (*ibid*). On the other hand, it must be recognised that these apps are often "untested and unscientific and they will open the door of uncertainty. Make no mistake: diagnostic uncertainty ignites extreme anxiety in people" *(ibid).* It must be examined whether these consumer health apps actually provide better health outcomes to already-healthy individuals, or whether they just provoke anxiety in the "worried well" (*ibid*). The identification and labelling of lifestyle products has been "advanced by scientists who, while legitimising the 'seriousness' of these tests, negotiated the space for a 'hybrid or compromise category' that would stand 'between medicine and consumer culture'" (Saukko et al., 2010: 751). Therefore, digital health and wellness apps renegotiate the boundaries between medical and lifestyle products. M-health as a component of E-Health is defined by the World Health Organisation (2011: 6) as a "medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants and other wireless devices". Lifestyle and wellness apps can be defined as "apps intended to directly or indirectly maintain or improve healthy behaviours, quality of life, and wellbeing of individuals" (EC Green Paper, 2014: 3). As part of digitised health promotion, digital technologies are increasingly promoted as having revolutionary capabilities to continually monitor bodily behaviours, reach certain social groups and tailor health messages (Lupton, 2013e). Broadly, digitisation and the internet's key role within healthcare practices "has ceased to be that of information provision: contemporary web-based platforms and services integrate information provision and data collection by encouraging patients and citizens to contribute data and information about themselves" (Prainsack, 2013: 111-112). Health 'norms' of populations and groups are 'created' by using these self-tracking devices to identify health differences and variations (Swan, 2013: 90). These 'personal health climates' focus on collecting as much data as possible on individuals' health states, everyday habits, social and geographic locations (*ibid*). This goes further than public health policy, and arguably informs, 'constructs' and 'shapes' individual health decisions by 'nudging' people to make decisions, which are presented as better for their health (*ibid*).

The first part (One) of this critical review of the literature has provided a historical contextualisation of public health discourses from the birth of the British National Health Service to today's individualising neoliberal practices, which have become problematically advocated and embedded within society through consumer self-tracking and digital health devices. Part Two will examine in more detail how users are adopting and using these self-tracking technologies to learn about their bodies and to self-manage their health.

2.2 Part Two: Self-Tracking, Self-Quantification and Surveillance

Since the seventeenth century "technologies of measurement have been shaped into tools to produce legitimacy and authority" (Nafus and Sherman, 2014: 2). The information technology revolution of the twentieth century made it possible to govern individuals and cities through a variety of surveillance methods (Townsend, 2013). Lyon (2003: 20) understands surveillance as a system which "obtains personal and group data in order to classify people and populations according to varying criteria, to determine who should be targeted for special treatment, suspicion, eligibility, inclusion, access, and so on". These practices of measuring populations are "entangled with the practices of measuring and disciplining bodies" (Nafus and Sherman, 2012: 4). The production of authority and the disciplining of populations and various bodies is exercised through the national census, which identifies population size, and demographics, discerning "people who count from those who do not" (Scott, 2012 [1998]: 2). Poovey (1998: No Page) outlines how it was the "fledgling business class who first effectively mobilised the gravitas of scientific rationality to legitimise commerce by creating distance between the measured and the measurer". This distancing between the measured and the measurer enabled through "merchants' early accounting techniques, turned into vast and elaborate tools of state control" (Nafus and Sherman, 2014: 2) and first evoked big data ideologies of cataloguing, systematisation, quantification and making useful knowledge about the world (*ibid*). As Ajana (2017: 1) highlights: "life in the 21st Century is witnessing an intensive infiltration of networked wireless technologies and digital mobile devices. Individuals and societies are becoming increasingly reliant on algorithms and data to manage all aspects of everyday activities". These new types of surveillance are "increasingly comprehensive and extensive, and includes individual and cross-referenced data, information that goes far beyond the traditional records kept by churches or schools [for example]" (Moore, 2017: np). In this regard, the quantified-self movement (QS) (Wolf, 2010) is a key demonstration of neoliberal self-management and self-surveillance practices which, like the earlier 1980s discourse advocated by Thatcher's government, prioritises individual choice as a mechanism for the self-improvement of health.

Self-quantification is the reliance upon science, and the technological extensions and affordances of scientific sensors in the monitoring of the self and individual health (Wolf, 2010). Participants of the quantified-self (QS) movement, through consumer devices, monitor everything that can be put into data to 'improve' and 'optimise' individual health. Gary Wolf, co-founder (with Kevin Kelly) of

the movement has called it 'self-knowledge through numbers' *(ibid).* The 'quantified self' movement came from a California-based laboratory, which now has an international collaboration of users and makers of self-training tools (Swan, 2009). Swan (2013: 86) understands self-quantification as "contemporary formalisations belonging to the general progression in human history of using measurement, science, and technology to bring order, understanding, manipulation, and control to the natural world, including the human body". Swan *(ibid)* argues that the quantified-self movement is inherently a big data problem, in terms of collection, processing and analysis. This movement, or rather its practices of capturing data, can now broadly be described as 'self-tracking': the process of tracking aspects of our bodies and our minds, which promotes "an exploratory worldview in which the key goal is learning through the process of data collection and interpretation" (Fajans, 2013: No Page). This perspective takes a particularly techno-utopian angle, similarly to Nafus and Sherman (2014), who suggest that self-quantification could be considered as an alternative to Big Data practices, since self-management could be considered emancipatory when compared to the perspective of wider state surveillance. Digital health practices and the affordances of self-tracking devices and social media have dimensions of both self-surveillance and wider surveillance. Robins and Webster (1999: 180) argue that such types of "social control [have become] more pervasive, more invasive, more total, but also more routine, mundane and inescapable". Therefore, such self-surveillance may in fact be normalised, even 'desired' as a way of proving individual responsibility within neoliberal advocated citizenship practices and behaviours: "these surveillant assemblages are ideally configured voluntarily, as lay people judge their participation in self-surveillance as being in their own best interests" (Lupton, 2013e: 12). Self-tracking therefore, ensures that the body and health are "being subjected to regimes of knowledge production and data-driven modes of bio-power" (Ajana, 2017: 2). These regimes of bio-power and neoliberal judgement dictate which is and what is not healthy, productive and self-bettering behaviours, subsumed through discourses of competition and comparison (Davies, 2016; Cederstrom and Spicer, 2015).

Swan (2012a) identifies three layers to self-tracking technologies: firstly, input via sensors and devices; secondly, analysis via algorithms and signal processing; and lastly, services via visualisation, storage and feedback. This thesis proposes a fourth aspect: the way users may use their data and visualisations to self-represent certain 'health' identities. It is through these self-representations that comparisons between 'healthy' bodies or lifestyles can be made, in turn competition can also act as a motivator for self-trackers:

> The great appeal of competition, from the neoliberal perspective, is that it enables activity to be rationalised and quantified, but in ways that purport to maintain uncertainty of outcome. The promise of competition is to provide a form of socio-economic objectivity that is empirically and mathematically knowable, but still possessed of its own internal dynamism and vitality (Davies, 2015: 41-42).

This thesis focuses on the participants' engagement with these practices of 'knowing thyself' (Wolf and Kelly, 2007), as these technologies attempt to produce knowledge and understandings of the body. Furthermore, this thesis examines the problematic aspects of identifying with and

understanding one's own body through such technologies whilst recognising "this growing trend of self-quantification and data-driven modes of health monitoring, particularly with regard to issues of privacy and data ownership as well as the marked shifts in healthcare responsibilities'" (Ajana, 2017: 2). This may worryingly become embodied by the users themselves, for if 'health' becomes situated as best managed through these commercially-mined technologies, privacy is repackaged as in opposition to the 'collective' and 'public good', which is framed as making populations 'healthier' through data mining *(ibid).* This philanthropic data discourse, which in recent years has attempted to legitimate data mining and privacy invasions ensures "privacy is dead and profit is king (…), any reuse of data beyond the original purpose for which it was collected is a potential threat to privacy and civil liberties" (Kirkpatrick, 2017: 11), which is not always recognised by the users themselves. As Kelvin (1973) argues, the role of privacy becomes a nullification mechanism for advocating surveillance. Therefore, self-trackers' voluntary self-surveillant practices problematically play directly into state discourses, as well as capitalist and corporate profit strategies.

This thesis focuses on examining both the quantitative and qualitative aspects of self-tracking. Data related to self-tracking is concerned with how numbers, graphs and statistics, as well as photographic representations of the body, (gym) 'selfies', food or exercise equipment (yoga mats or bicycles for example) all provide the ability to capture the messiness and multi-dimensional aspects of one's life in "controllable life slices" (Ruckenstein, 2018: 6). Through individually quantifying behaviours and habits, generated via 'miniaturised mobilities', Elliot and Urry (2010: 6) argue that this "enable(s) people to deposit affects, moods and dispositions into techno-objects". With the capability to track and monitor increasingly-expanding aspects of our bodies: "increasingly, the market sees you from within, measuring your body and emotional states, and watching you as you move around" (Fourcade and Healy, 2017: 23). Purpura et al. (2011: 6) have argued that "the increased reliance on scientific measures of healthiness has left users ever more uncertain of what to eat and increasingly dependent on scientific experts to inform them". The sheer abundance of data and nutritional information available just further complicates 'health (mis)information', as everyone becomes an 'expert' on optimising good health. As Kristensen and Ruckenstein (2018: 12) assert: "sensors and devices [have] become part of the processes in which the self is defined, extended, reduced, or restricted". So how do users, patients and citizens actually self-track, quantify and utilise digital health technologies to self-manage health?

Patients using these platforms to manage their health "frequently engage with medicine in a manner that integrates diagnosis, treatment and research" (Prainsack, 2013: 112). These lifestyle choices are conceptualised and referred to as different "styles of living, which in turn are shaped by their patterns of consumption" (Nettleton, 2013: 3). Although we could all be affected by illness or disease, which we could not have protected ourselves from, the neoliberal individualisation discourse places responsibility in the hands of the sufferer: "If (…) people suffer from illnesses as a result of allegedly deliberate actions or actions against better knowledge, then they are to be taken to be accountable and indeed responsible for their condition" (Buyx and Prainsack, 2012: 81). These arguments advocate individual health responsibilisation as the rhetoric to support digital health applications and self-tracking; "[O]ur personal understanding of who we are connected with

– in the sense of reorganising similarity in a relevant respect – shapes our judgements of what situations people should be held accountable for" *(ibid).* Digital health technology however, does attempt to fill this void with discourses of health management and 'evidence-based optimism' *(ibid),* through health 'optimisation'. Discussions around who is responsible for poor health "distract the attention of policy makers from addressing the underlying and hugely important social determinants of health" *(ibid:* 82).

In the context of the risk society (Beck, 1992), risk is contextual to what we examine and look at: "it can be seen as a concept created to allow the quantification of circumstances and situations that do not really lend themselves to quantification" *(ibid:* 83). Beato (2012: No Page) argues that by "intimately monitoring themselves, they increase control over their own lives, liberate themselves". Beato *(ibid)* articulates a particularly utopian perspective with relation to data, privacy and wider surveillance debates, which are advocated particularly by weight loss organisations. Heyes (2006: 145) argues from a more critical perspective and speculates as to how individuals can engage with (digital) health practices without becoming "the projected unified subject of its regime". Beato (2012) and Heyes (2006) take an arguably limited view, which does not take into consideration self-governance as an extension of neoliberal controlling rationalities. The following section will explore such governance through the discourses of bio-politics.

2.2.1 Bio-Politics

Bio-politics, as briefly introduced in the first chapter, refers to techniques of governance over a population as a political problem, that it is at once scientific and biological as well as about the politics of power (Foucault, 1976: 245). As Foucault (1976: 252-253) expands:

> To say that power took possession of life in the nineteenth century (…) is to say that it has, thanks to the play of technologies of discipline on the one hand and technologies of regulation on the other, succeeded in covering the whole surface that lies between the organic and the biological, between body and population. We are, then, in a power that has taken control of both the body and life or that has, if you like, taken control of life in general – with the body as one pole and the population as the other.

In a neoliberal society, individuals are positioned as consumers of health expected to take personal responsibility and education to maintain individual self-care. Non-commodified public spheres like healthcare are being replaced by commercial systems through the adoption of self-tracking devices, which serve to monitor and encourage self-regulatory monitoring behaviours.

> [D]iscourses of digitised health promotion position digital technologies as providing the obvious solutions to social and economic problems. [Holding] out the promise of control (…) over the unruly population who are viewed as making ever-greater demands on the health system and the budget of governments (Lupton, 2013e: 14-15).

Lupton identifies one of the key issues around self-tracking and quantification: its practice in relation to bio-politics and state surveillance. We can understand "bio-metrics as a technology of bio-power whereby the body and life itself are the subject of modalities of control, regimes of truth,

and techniques of sorting and categorisation" (Ajana, 2013: 5). It must therefore be recognised that whatever is being captured by these devices is biased towards whatever a particular population wants to capture. As Nafus and Sherman (2014: 1) argue: "The QS [quantified-self] movement attracts both the most hungrily panoptic of data aggregation business, and people who have developed their own notions of analytics that are separate from and in relation to dominant practices of firms and institutionalised scientific production". Rose (2009: 11) similarly acknowledges that medicine is reshaped by "requirements of public or private insurance, their criteria for reimbursement (…) treatment of health and illness as merely another field for calculations of corporate profitability". The role of national capital and state priorities, therefore, directs and informs public health:

> Bio-politics does not intervene in a therapeutic way nor does it seek to individualise or modify a person (this would entail the production of subjectivity itself). Instead it functions at the level of generality with the aim to identify risk groups, risk factors, and risk levels, and therefore anticipate, prevent, contain and manage potential risk (Foucault, 2003*:* 235-236).

Foucault, here identifies how bio-politics does not take into consideration individual subjectivities but operates at a wider level, demonstrating a passage from disciplinary to control societies (Lazzarato, 2006: 171). This is what makes "bio-power more effective and less obtrusive" (Rose, 1999: 236). As Ajana (2005: 3) astutely observes: "without subjectivity, the possibility of resistance fades into the immanent arrangements and administrative operations of bio-politics". If bio-politics does not acknowledge subjectivity, but operates through state-wide subtle rationalities, how can an individual or the public resist or reject dominant systems? This becomes "part and parcel of responsibilisation through which individuals are made in charge of their behaviour, competence, improvement, security, and well-being" *(ibid).* Such a proliferation of systemic dominance over the public becomes embodied and bio-politics therefore becomes effective: "the maintenance of the healthy body [has become] central to self-management of many individuals and families, employing practices ranging from dietetics and exercise, through to the consumption of proprietary medicines and health supplements, to self-diagnosis and treatment" (Rose, 1999: 10). In neoliberal societies, self-surveillance as a means of self-managing health is a common feature of proactive citizenship responsibilities.

Foucault (1975) outlines that there are two dominant ways to exert political power: discipline and exclusion. From this perspective, we can identify how bio-power is articulated and how bio-politics is inherent within the management of 'life'; the life of those who are capable of performing 'responsible self-government' (Rose, 2007: 259) through the utilisation of surveillance and associated technological capabilities (which then become internalised). Such practices are subsequently adopted through individual self-maintenance. Similarly, Ajana (2005: 1) considers electronic biotechnology as "intensifying the 'capacity' and ubiquity of surveillance creating 'new' forms of social control". Therefore, social control operates through a deep anxiety of identity, becoming increasingly articulated through individual self-responsibilisation towards others (Giddens, 1991). The 'othering' of oneself, and the differentiation of one type of body and citizen

from another is another dominant discourse within bio-politics. As Clough (20101:11) "It is through this intersection of bio-media and new media, the biomolecular body and the embodiment, that the flows of a political economy of affect are traversing, (…) reconstituting the norms of living and living as a human subject". This manifests itself through the risk calculation of socio-economic groups for example, but is problematised at the individual level, through identity maintenance enacted through the individual attribution of (citizen) rights and obligations advocated by wider systemic institutions (Ajana, 2005; Giddens, 1991). A class politics surrounds dieting and health management. Therefore: "not only does being thinner often increase class mobility and economic rewards, but if you are stuck in a pink-collar job that has little space for personal accomplishment, then setting your goal and taking action to achieve it can also feel especially empowering (however over-determined by disciplinary technology)" (Heyes, 2006: 137). Bio-politics operates upon three levels: individual, commercial and the state. The device operates despotically, mastering the self through socio-technological tools to enable attentive self-care. The device further extends the capacities of knowing yourself, through imputing bio-metrics into a digital device, which is then algorithmically managed and manipulated based upon health practice goals (weight loss or gain, exercise management, nutritional information etc.). This is clearly a techno-utopian and deterministic view, but an element of truth remains simply in the device's capacity. It could further be argued and is by self-trackers, digital health technology developers, and often the state or the NHS, that such management, attentiveness and mastery of the self, health and 'personal rehabilitation' (Cederstrom and Spicer, 2015: 134) enables an increased consciousness for the individual in 'knowing thyself', to use the utopian discourse celebrated by the QS founders Kevin Kelly and Gary Wolf.

Foucault's thesis (1976) argues that the growth of capabilities occurs in tandem with the intensification of power relations, as demonstrated here through weight-loss and self-improvement discourses: "People diet because they act on false beliefs about the possibility and desirability of losing weight for the sake of their health" (Heyes, 2006: 126), and physical appearance. Foucault (1984: 27) understands this as 'assujettissement', which is the process of at once becoming a subject and becoming subjected. This is emphasised through technologies of power, which present themselves as technologies of the self, discursively embedded within dominant patriarchal disciplinary practices. The myths surrounding weight loss or optimising health advocate that there is a standardised range within which individuals' weight must fall in to be 'healthy'. Self-tracking practices perpetuate such myths within application functions such as community league tables, performance graphs, and through nudging tools advocating better health outcomes or increased weight loss from app usage. Heyes (2006: 128) identifies how "standardised weight tables are artefacts of actual insurance company definitions, that were themselves never based upon comprehensive statistical information". Heyes (*ibid*) understands the proliferation and embodiment of such discourses through the notion of a 'false consciousness'. 'False consciousness' operates through the implication that "certain social realities are systematically obscured by an internally coherent ideology whose propagation has material benefits for a dominant group" *(ibid:* 129). This ideology operates through oppressive patriarchal discourses of fat shaming, myths around what constitutes 'good' health and weight, and idealised body shapes *(ibid).* Such

disciplinary power demonstrates the politics of the ordinary. These disciplinary discourses are advocated by health, lifestyle and beauty companies who commercially profit from the global drive for increased health benefits, beauty and body ideals, as well as by government or state institutions who also financially gain from the self-responsibilising management of health, by distancing their responsibility within the welfare state. This is often articulated through moral discourses of poor health being attributed to poor lifestyle decisions, fat shaming or 'victim-blaming'. We inherit ways of thinking when "a picture is subject to reflection, and taken to be universal, necessary, or obligatory" (Owen, 2003: 87). Such discourses are not simply oppressive from such 'external' institutions and the practices of a capitalist society but become dominant through internalised discourses of individual health betterment. The "false consciousness model must understand power as both repressive and enabling" (Heyes, 2006: 130), which operates through ideological and aspectual captivities.

2.2.2 Bio-Media

Thacker (2003) further describes this shift as the body rendered visible through biotechnological information, such as 'bio-media', or the "pre-informatic body confronting a set of central techniques and technologies whose aim is to render everything as information" *(ibid:* 47). Therefore. the concept of bio-media places the emphasis less on "'technology' as a tool, and more on the technical reconditioning of the 'biological' self *(ibid:* 52). In other words, it can be asked what happens to how we view and experience the human body, if it is experienced only as a data representation? The goal of bio-media "is not simply the use of computer technology in the service of biology, but rather an emphasis on the ways in which an intersection between genetic and computer 'codes' can facilitate a qualitatively different notion of the biological body, one that is technically articulated and yet still fully biological" *(ibid:* 53). In essence, biological technology can perform in ways beyond the biological, whilst still being biological (Clough, 2010). Or, it can be said that the "biological informs the digital, just as the digital 'corporealises' the biological" *(ibid:* 5). Alternatively, for Beato (2012) self-surveillance is the ultimate demonstration of individual empowerment and control from surveillant institutions for the benefit of the individual. The gaze of medical professionals, a status-infused level of expertise, once ensured that the self-monitoring of bodily functions and self-diagnosis was impossible. However, now anyone with access to digital health technologies can access diagnostic information and have the ability to monitor their own health via these technologies. In other words, citizens and lay people can now adopt the medical gaze:

> Most self-trackers in no way cede authority to the supposed objectivity of devices, or the quantitative nature of sensor data. Instead they traverse between what is inside and outside the body. They put things out in the world (software, reminders, routines and sensors) in order to reflect on and reorder what us inside the body (the sensation of energy, mood or productivity) (Nafus and Sherman, 2012: 6)

Social analyses of self-monitoring devices and 'big' and 'small' data sets, however, do not jump to assumptions about their potential for revolutionising healthcare, but expose the inaccuracies of the

devices themselves and the data collected. As well as highlighting individuals who are digitally divided from these technologies, as well as those with literacy obstacles, who cannot self-track, monitor their bodies or be 'accompanied' by data. Other technological issues include partial or incomplete recordings (Beer, 2009; boyd and Crawford, 2012; Cheney-Lippold, 2011; Mort and Smith, 2009; Ruppert, 2011) variability in terms of their efficacy and precision (Van Remoortel et al., 2012; Lupton, 2013a, 2013c), and unreliable and are not user-friendly (Mol, 2009; Oudshoorn, 2011). These devices do not take into consideration external and unquantifiable factors such as ill health, stress or tiredness. Furthermore, digital health and self-tracking technologies are not always grounded in scientific knowledge. As Sharpe (2012: No Page) outlines: "many of these apps do not follow established medical guidelines and few have been tested through the sort of clinical research that is standard for less new-fangled treatments sold by other means". Dangers may come from a user ignoring symptoms based on the application's or device's prognosis, thus viewing the device or application as the medical authority, rather than medical professionals.

2.2.3 Persuasive and Coercive Technologies

This leads us to another key feature of self-tracking and digital health practices: the mediation of persuasive or coercive computing (Purpura et al., 2011) and the governance of the self (Rose, 1999; Foucault, 1979). Treating bodies as data moves life "beyond the body-as-organism; these biotechnologies (…) make it possible to treat life capacities or affectivity as a matter of 'non-organic-life', the latter referring to a conception of bodily matter or matter generally, where the capacity for self-organisation is understood to be immanent to matter" (Clough, 2010: 1-2). However, all human activity - physical, mental or emotional - cannot be fully reducible within self-tracking devices and platforms, limiting our definition of what needs scientific grounding and explanation. These devices are not just about enlightenment through data, but information produced to change users' behaviours. Furthermore, these technologies challenge and arguably shape our social values, meanings and understandings of how we interpret our environment. Lucivero and Prainsack (2015: 2) argue that "new technologies challenge our symbolic order, that is, the grid of concepts that are used in a certain society to order and categorise reality". In the context of digital health and self-tracking technologies, the distinctions between the physical body, data and the mind are renegotiated and shift our normative definitions and understandings of what we consider a 'body' and a 'person' (Lucivero and Tamburrini, 2007). Therefore, if we take a new materialist perspective, this "allows for the conceptualisation of the travelling of the fluxes of matter and mind, body and soul, nature and culture" (Dolphijn, 2010: 2). Which attends to enabling the examination into the shifts and definition of what we deem to be 'healthy' individuals, and patients as sufferers of ill health, in whichever capacity it is determined or captured. Felton (2014) argues that stories are how our human brain operates and makes sense of our environments. In turn, for biological data to be meaningful it has to become more than simply biological "now that data is this elemental part of our lives we have to translate it into stories in order to make it meaningful or operational for us" *(ibid:* No Page). What Felton means is that data by itself cannot be

enough to become meaningful or relevant; we have to create stories through data, whether it be at a large societal scale, for example socio-epidemiological considerations, or at an individualised level as a representation of your identity and self. Perhaps from here, we can understand the motivations behind the Quantified-Self (QS) movement and the uptake of self-tracking practices more broadly. As Moore and Robinson (2016: 2775) argue, the assumptions driving the quantified self (in the workplace) and arguably shifts towards self-tracking more broadly sit on an "ontological premise of Cartesian dualism with mind dominant over body". QS founder Gary Wolf (2010: No Page) considers the motivations behind the QS movement and arguably self-tracking, as 'self-awareness through data'. Self-awareness, however, is a subjective and ironically unquantifiable term. How can one determine if they are fully self-aware through a device or machine when the unquantifiable becomes dis-regarded and health is reduced in this over-simplified way? As Thacker (2003: 48) expands: "It is not just the medium [that] is the message, but that biology is the new medium: the medium is a message and that message is a molecule". Therefore, bio-media assumes that we "are informed by a single assumption: that there exists some fundamental equivalency between genetic 'codes' and computer 'codes', or between the biological and informatic domains, such that they can be rendered interchangeable in terms of materials and functions" *(ibid:* 52). In other words, bio-media cannot consider the non-sequential nature of ill health and disease. In doing so, we disregard the elements that we cannot quantify or neatly capture, in turn increasingly limiting our understanding of life itself, and within it, pathologies and 'health'.

Visualising our data, through graphic design interfaces could similarly be considered problematic, since through this semiotic layer of representation the data story is 'revealed' but also represented in an arguably sensationalist way (Ruckenstein, 2017). In the sense that the quantified self and self-tracking movement is concerned with self-awareness by numbers or data (Moore, 2017; Wolf, 2010), a representation of data is similarly created either through a new medium or reproduction. Although medics use diagnostic technologies, which produce data, the difference here is that non-medical or 'lay people' attempt to understand their bodies through sensationalised visual representations from digital health devices. Their perceptions of the digitised reproduction of bodily monitoring and bio-metrics may influence how this information is internalised and then acted upon by the self-tracker.

The motivation behind the design and choice architecture of health applications in influencing user behaviours demands further investigation. Beato (2012) describes the embodiment of decision-making within a technological device as 'choice architecture'. A choice architect "has the responsibility for organising the context in which people make decisions" *(ibid:* No Page) by presenting a range of elements and arguably influencing the decisions users make based upon those presented facts. Identifying digital health technologies as a powerful marketing tool within new health promotion practices, draws attention to the ethical implications of the platform's choice architecture, especially in advocating their use. A potentially dangerous aspect of choice architecture in these applications is that they are leading the self-tracker to become reliant on the device for health management and to ignore or disregard human instinct (De Maria, 2012). As

Duffy (2014: No Page) explains: "we are capturing everything, so our conclusions are not relevant to every person or to every situation. So how do you summarise and symbolise without oversimplification and distortion?". Quigley (2013: 588) expands on this, by asserting that device 'nudges' "can be conceived as part of an expanding arsenal of health-affecting regulatory tools (…) used by government [and commerce] and addresses some concerns which have been expressed regarding behavioural research-driven regulation and policy". This is a hugely important and potentially problematic aspect of such digital health and self-tracking devices, which needs addressing. If our behaviour changes as a direct result of being 'nudged' by a design driver, in response to wider socio-cultural and political priorities and pressures, this could have great ethical implications in terms of the motivations behind such designs.

The rise in new 'advanced' liberal government has involved "a reorganisation of the powers of the state, with the devolution of many responsibilities for the management of human health and reproduction that, across the twentieth century had been responsibility of the formal apparatus of government: devolving these to quasi-autonomous regulatory bodies" (Rose, 2007: 3). Consumer self-tracking devices can be considered techno-deterministic and techno-utopian in their promotion of the idea that data capture is the best method to improve health and that their tools are the best available. These perspectives provide certain ways of knowing what data is, why it is important, who gets to interpret it and to what ends. As Ajana (2013: 10) asserts: "citizenship is seen as becoming a hollowed out concept whose carcass is increasingly shaped around techniques of identity management". Like the 'wellness movement' (Leichter, 1997: 359; Cederstrom and Spicer, 2015) of the 1970s and 1980s, which encouraged lifestyle correction and infused health behaviours within a moral discourse, to encourage certain health and lifestyle behaviours through hegemonic socio-political discourses, "design-based regulation could be conceived of as almost synonymous with using technology as a regulatory modality" (Yeung and Dixon-Woods 2013 [2010]: 598). Indeed, it becomes representative of individual identities. As Rose (2007: 4) identifies: "these modifications in rationalities and technologies of government have also involved an increasing emphasis on the responsibility of individuals to manage their own affairs (…) with a prudential eye on the future". Patients become 'active' and responsible consumers of medical services and products (Rose, 2007). In turn, "this complex, of marketisation, autonomisation and responsibilisation gives a particular character to the contemporary politics of life in advanced liberal democracies" (Rose, 2007: 4). Practices of quantifying and tracking the self therefore, are paradoxical. These devices and practices are not monitoring the self, but the body. These practices therefore, construct a dualism between the self and the body (Moore and Robinson, 2016). This dualism stresses that "the body is not the self, the mechanism is just monitoring the shell within which the ghost, that is you, can be better" (Duffy, 2014: No Page). Therefore, self-surveillance becomes an individualised pressured cycle of standardised meritocracy; further enhancing an increased need for self-knowledge (Langwieser and Kirig, 2010).

The second part of this review of literature has examined in detail the limitations and problematic practices of self-regulation, discipline and the advocacy of personal choice to 'improve' health,

through both neoliberal political discourses and self-tracking technologies. The third and last part of this chapter will explore the potential for sharing this data and the performances of 'health' identities enabled through sharing self-representations on social media platforms, in particular Facebook and Instagram.

2.3 Part Three: Self-Presentation and Social Media

2.3.1 Self-Presentation Theory

Goffman (1959) understands self-presentation as a performance, which he describes as the "activity of an individual which occurs during a period marked by his continuous presence before a set of observers and which has some influence on his observers" (1959: 22). Goffman *(ibid)* understands these performances through the lens of 'front' and 'back stages'. Through the 'front stage' we are trying to present an idealised version of the self, according to a specific role (lecturer, audience member etc.). The 'back stage' "is a place relative to a given performance, where the impression fostered by the performance is knowingly contradicted as a matter of course" *(ibid:* 112). It is here where we do the 'real work', which becomes necessary to 'keep up appearances' (Hogan, 2010: 378). These fronts "involve the continual adjustment of self-presentation based on the presence of others" *(ibid:* 379). Online, however, we are not immediately positioned as in front of our audience, and therefore this 'presence of others' is sometimes imagined. The audience or online community (the difference between the two can be acknowledged as contextual), is imagined in the mind of the user, or 'performer'. In the case of broadcasting and newspapers, media audiences were traditionally imaginary (Manovich, 1989). Web 2.0 enables far more participation over Web 1.0 capabilities through 'prosumers' (Toffler, 1980: 11), who are both producers and consumers that participate and contribute in blogs, online news forums, and social media sites (for example, Twitter, Facebook, Instagram), including online health communities (Nike Running Club or My Fitness Pal for example). Before Web 2.0, much online content was intended for specific audiences, for example email and instant messenger. The proliferation of different types of online content has changed what is 'addressed' to specific audiences or 'submitted' to unlimited viewers. This blurs the traditional practices and roles of content producers and consumers. As Nancy Thumin (2012) argues that as participatory media are becoming increasingly ubiquitous in our daily lives, this extends practices of mediated self-representation, in turn demanding the need for ever more analytical attention. Social media enable tools for self-presentation and identity management, which includes issues of identity and identification (Jakala and Berki, 2004: 2). Therefore, the functions and affordability of social media and self-tracking technologies enable both the self-presentation and performance of the self (Thumin, 2012). The increased uptake and usage of participatory media has shifted how users communicate with one another in the context of audience feedback, particularly on social media. We can identify performances of the self and self-presentation as conceptually different, but unlike face-to-face performance, online performance of the self is bounded within platform affordances. Therefore, mediated performances within online

spheres, platforms and social media, challenge existing notions of the self-presentation and performance of the self, as both concepts now become mediated and bounded within textual spheres and objects online: "it becomes a text that has the potential for subsequent engagement" (Thumin, 2012: 6). Perkins (2000: 76) argues that "representations, play an important role in formatting ideas about and attitudes to, the world (…) – in short they do political work". Self-representation holds within it politicised mediation practices; we make choices about how the representation is created or constructed, and the strategies employed to achieve this. Thumin (2012: 5) argues that online communities "should be understood as a part of ongoing struggles to make spaces for more democratic media production". However, this line of argument fails to recognise the algorithmic sorting and data mining built into online platforms. It therefore can be asked how self-representations are mediated within digital cultures, if we consider that "the affordances and the constraints resulting from digital technologies shape everyday life across multiple facets" (Thumin, 2012: 10). Self-representation theory has identified the processes of mediation implicit in this practice. Notable examples include Stuart Hall's 1973 work on the process of 'encoding and decoding', and his 1997 work on the influence of the circuits of culture, as well as Jay Rosen's 2006 work on the influence of the process and mediation of audience reception. Understanding how self-presentation works "requires us to use concepts emphasising the sense of process and movement between sites of production, text and reception" (Thumin, 2012: 13). This process is often visually and textually represented within online communities and social media, providing new and unique insights into how self-presentation works within digital culture. Perhaps it could be argued that digital culture simply provides a visual outlet to identify and examine such practices and mediation that exists already within contemporary culture; "The practice of audience-hood as a participatory, self-representational activity is normalised (through the textual spaces for self-representation) in digital culture" *(ibid:* 15). There is a widespread belief that self-representation will be 'there' forever *(ibid),* proliferated through digital platforms' ability to capture and hold onto such self-representations: "when someone produces a self-representation they produce a bounded text, however fleeting and ephemeral that text might be" *(ibid:* 6). Social media permit a performance of the visual and textual sociality of our communications. This visual performance produces the social space (Lefebre, 1991) in which interactions and exchanges take place. Therefore, it can be asked whether the motivation behind social media use is simply the ability to monitor, comment or provide feedback on the lives of others, and to create instantaneous communal sociality. As Marwick and boyd (2010: 16) assert:

> Like the broadcast audience, the networked audience includes random, unknown individuals, but unlike the broadcast audience, it has a presumption of personal authenticity and connection (…) This opportunity for communication influences how speakers respond and what content they create in the future.

Although the convergence of social spheres and context collapses online, social networking can be understood as a "condition of participation and opportunity" (Thumin, 2012: 137). The rewards for users are communicative sociality, knowledge and information sharing, while the reward for institutions, the state, and data mining companies is the economic value of accessing and sharing this data. Cote (2013: 122) argues that "understanding agency as distributed across human non-

human assemblages is a hallmark of new materialism". This has increased the traces of ourselves we leave across various mobility systems. Through uploading content, using applications, products and services, this data trace is commercially mined (Elliot and Urry, 2010). Thumin (2012: 155) extends this argument by highlighting how "the conceptual separation of the three dimensions of the mediation process [institutional, textual and cultural], emphasises the need to consider how exactly the institutional and industrial structures intersect with textual forms and cultural participation". When analysing self-representations online it is important to recognise that platform developers and associated institutions algorithmically construct who sees what, who the audience is, and which content will be available to them, through the choice architecture of the platform (*ibid*). Therefore, "the question of whether platforms for self-representation are publicly funded or profit-driven for example, and crucially, to whom they are accountable, are key aspects of the process of institutional mediation shaping any self-representation that takes place" *(ibid:* 139). While we can to an extent consider platforms as a medium to represent, freedom is dependent on the literacy the user has with the website or application, as well as the choice architecture, design and technological restrictions of the platform. Furthermore, the varying process of mediation, which shapes self-representations, is contextual, and dependent on the user's ability to manage the 'public-ness' of the content within privacy settings.

2.3.2 Self-Representation through Curation

Historically, representations were made by a set of people, for example curators or filmmakers (Thumin, 2012). Through the rise of social media, we have become both curator and subjects: "Curators mediate our experience of social information. Good curation presents things to the user that the user finds relevant or interesting. Bad curation is either overwhelming or unexpectedly irrelevant" (Hogan, 2010: 381). In the context of social media and user curation, it can be asked who is being addressed and how the selected users' 'friends' are determined online. Hogan (*ibid*: 382) considers that on social media "Curators use this list of friends in order to determine how to properly distribute content. This list, however, is not tethered to a situation, but to an individual in a specific situation". This management of online connections, friends and followers means that users' self-presentations are no longer based on context and audience, but on content management to potentially infinite, or at least unquantifiable and indeterminable audiences (Marwick and boyd, 2010). Thumin (2012: 8) considers self-presentation as "privileging the experience of the individual self". For example, reputation management can be mediated through online self-representation; qualifying signals of status; demonstrating literacy through cross-platform posting; and making substantive claims through platform conventions, affordances and cultural norms. Therefore, in consideration of these 'etiquettes' and in the context of self-representation on social media, it is questionable how much the individual self can in fact be 'privileged', when such representations are mediated and curated by the individual in conjunction with technological affordances, algorithmic sorting, and platform-specific social media etiquettes.

The capacity of friend connections and networks online encourages a context collapse of audiences: "it collapses all of the partially overlapping social circles of modern life into a single list" (Hogan, 2010: 383). The imagined audience is catered for by the mediation of tensions between revealing and concealing: "These data traces do not merely document our passage in life's play but mediate our parts. We can interact with data left by others alongside direct interactions with people themselves. The world then, is not merely a stage but also a participatory exhibit" *(ibid:* 377). Imagined audiences online are maintained through the careful and balanced mediation between self-censorship and exposure. Audience feedback often manifests itself through perceptions of authenticity: "Participants must maintain equilibrium between contextual social norms of personal authenticity that encourages information-sharing and phatic communication with the need to keep information private (…) or concealed from other audiences" *(ibid:* 11). However, authenticity is decided upon by the audiences' meaning-making processes and interpretations. Therefore, it can be asked how users present their online presentation as authentic when this is a false dichotomy, "given that both the performance of authenticity and inauthenticity are equally constructed by discourse and context" (Cheng, 2010 [2004]: 11). Yet, it is important to note that what is considered authentic or inauthentic differs across contexts, as Walter Benjamin acknowledges in his seminal (1973) work, 'The work of art in the age of mechanical reproduction':

> In the same way today by the absolute emphasis on its exhibition value the work of art becomes a creation with entirely new functions, among which the one we are conscious of, the artistic function, later may be recognised as incidental (1973: 225).

What happens when users' content (comment or images etc.) gets 'shared' or 're-tweeted' and then viewed by further audiences outside the users' online connections? Does it lose its authenticity once the content is no longer directly produced or articulated from the source, as Benjamin (1967) would argue? Or does sharing content legitimate and authorise its authenticity, value and status as it demonstrates that other users within the community are in agreement and positively acknowledge the content? Marwick and boyd (2010) argue that users can fail to recognise the often-limitless boundaries of social media platforms and treat them as though they offer a bounded space. boyd (2007: 131) similarly considers that social media users "take cues from the social media environment to imagine the community". These discussions resonate with Benedict Anderson's definitions of a nation as an imagined political community, which he argues is "imagined as both inherently limited and sovereign" (1983: 49). This thesis does not propose that social media is necessarily conceived explicitly within these parameters by users, but through the process of labelling connections as 'friends', social media require participants to publicly articulate connections, thereby enabling them to "write their audience into being" *(ibid:* 6). The imagined audiences on social media, therefore, become important in the recognition of how users construct self-representations. As Anderson (1983: 49) expands on his concept of imagined communities, he explains; "It is imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion". Similarities can be drawn from how social media users, may not know their

entire network or audience, yet perceive a sometimes-imagined community of users who may be viewing or surveying their content, which similarly mitigates their sharing behaviour; what they share, on which platform and why. Therefore, how users choose to present themselves online can be curated in attempt to draw out engagements and feedback from the imagined community. Furthermore, when considering sharing etiquettes on social media, there can be stigma attached to the concept of 'oversharing' (Kent, 2018: 66-67). However, attempts to define 'over-sharing' is problematic as the practice itself is contextual and representative of the cultural norms, values and etiquettes of the platform in which it is situated. Therefore, it is arguably the user which mediates and determines the boundaries between exposure and self-censorship, which contributes to attempts at authenticity to avoid 'oversharing'.

2.3.3 The Commodification of Social Ties

When we unpack the production of the self, through self-representation online as a conscious process that seeks to legitimise an original or authentic persona, social media users are constructing an idealised self through careful assembling. van Dijck likens the construction of online personas to the construction of personal 'brands': "Promoting and branding of the self has (…) become a normalised, accepted, phenomena in ordinary people's lives" (2013a: 203). We can consider interactions online, and the types of self-presentations projected as a form of self-branding, and in turn a commodification of social ties. In this process, "strategically appealing to followers becomes a carefully calculated way to market oneself as a commodity in response to employment uncertainty" (Marwick and boyd, 2010: 6; see also, Hearn, 2008; Lair et al., 2005). However, this thesis is not concerned with analysing users of social media who gain commercially from constructing and sharing self-representational health content, known as 'influencers' (Freberg et al., 2010: 1). This thesis is concerned with lay people who, through sharing content, may without premeditation commodify their self and become a 'micro-celebrity' of their own lives (Marwick and boyd, 2010: 114). This 'micro-celebrity' is a form of personal branding and strategic self-commodification through performance, in consideration to the (imagined) audiences online (*ibid*). Personal branding online becomes synonymous with 'authenticity', often without recognition that 'authenticity' is very much a social construct (Sternberg, 1998). These types of self-presentation are conceived with consideration of the expression one 'gives' and the expression one 'gives off' (Goffman, 1959):

> Identity and self are constituted through constant interactions with others (…) self-presentation is collaborative. Individuals work together to uphold preferred self-images of themselves and their conversation partners through strategies like maintaining (or 'saving') face, collectively encouraging social norms, or negotiating power differentials and disagreements (Marwick and boyd, 2010: 10).

Therefore, the impression that the user attempts to 'give off' and perform, may be related to the considerations of the group requiring certain types of expression (Goffman, 1959). Considerations of the 'imagined' audience or expected community surveillance mediates this self-presentation:

"Individuals learn how to manage tensions between public and private, insider and outsider, and frontstage and backstage performances" (Marwick and boyd, 2010: 17). However, we cannot always ensure that the presentation we attempt to 'give off' is received as intended:

> Knowing that the individual is likely to present himself in a light that is favourable to him, the others may divide what they witness into two parts: a part that is relatively easy for the individual to manipulate at will, being chiefly his verbal assertions and a part in regard to which he seems to have little concern or control being chiefly derived from the expressions he gives off (Goffman, 1959: 139).

The splitting of perceptions within the online community, audience or group must be acknowledged. Goffman understands this as something of an information game: "a potentially infinite cycle of concealment, discovery, false revelation and rediscovery" *(ibid:* 140), as an attempt to manage and maintain the perception the user 'gives off'. In the example of Facebook, and specifically through the 'Timeline' format, "Users may release more 'social' and personal data than they would like, but it also gives them an instrument to carefully craft their public profile. The fine line between what has been called 'authentic' and 'idealised' (or inauthentic) self-promotion requires a precarious balancing act (…) which users are not always aware of or are not always good at" (van Dijck, 2013a: 211). For example, "reputations on social media are treated as an individual responsibility, while in practice exceeding individual control" (Trottier, 2012: 321) in relation to data mining and invasions of privacy, as well as algorithmic sorting of content.

2.3.4 The influences of Socio-Technological Affordances on Self-Representation

Estami et al. (2015) argued that users are still largely unaware of the process of algorithmic sorting. In recent years, and as this thesis's research findings show, users' awareness of their presence has grown. However, little is still understood by (lay) users as to exactly how algorithmic sorting works in each social media platform or self-tracking technology. It is important for users to recognise that visibility is not transparent or impartial. Rather, it is linked to a series of small actions, and the connections between users and their value is attributed to these actions by algorithms. Barriers to understanding how content is situated and organised still exist for some users; in particular with regards to how Facebook, Instagram and self-tracking technologies' news feeds or content streams are algorithmically fabricated. It can therefore be asked how algorithms create visibility for the networked image, status update or content, and why this is important for networked sociality, communication and self-representational practices. We are creating a representation of ourselves on these platforms, which places users as subjects whose visibility is algorithmically informed and curated. We can understand these socio-technological affordances and forms of algorithmic sorting as a form of disciplinary control and an extension of the bio-political: the identification and regulation of life logging, and governance of the self. This is achieved by "forcing users to encode their information homogenously, it is easier to automatically detect patterns of behaviour and manipulate them" (van Dijck, 2013: 206). Here we can identify how the technological affordances and functionality of platforms regulate and discipline certain information as well as communication and sociality, which is then commercially mined: "Platform owners are interested in standardisation as well as customisation; if personal data are inserted and presented uniformly, it

is easier for advertisers to mass-customise and personalise their marketing strategies, while real-time statistics help them keep track of their success" *(ibid).* These platforms, therefore, blur the lines between sociality and consumerism. Algorithms can be identified as coded quantifications of sociality, which trigger connections (Beer, 2008, 2009; van Dijck, 2013a, b). As van Dijck (2013a: 202) asserts:

> Interface technologies translate relationships between people, ideas, and things into algorithms in order to engineer and steer performance. Most of these buttons tend to register emotional, immediate and intuitive responses, generally treating them as unintentional expressions of the self.

Social media, through its algorithmically and computationally organised sociality channels, sculpt and shape personal identity. For example, "the subtle adjustments of interface strategies over the years show how platforms deploy users' needs for connectedness (…) they push narrative forms to enhance the traceability of social behaviour" (van Dijck, 2013a: 212). The functionality of Facebook has evolved with its uptake by users. Over time, this has shaped how users represent themselves. For example, the 'Timeline' function is focused upon life-logging; "Timeline lets you tell the whole story of your life on a single page" (Zuckerberg, 2013 [2012]: 204). Therefore, its interface becomes more "directional thus channelling user's modes of self-presentation" (van Dijck, 2013a: 204). Facebook makes explicit links between memory and emotion through narrative biographical socio-technological affordances *(ibid).* This mediated personal expression, is constructed through "each decision to customise your timeline (…) [which] implies not only a decision about the (private) reassembling of one's life, but also a conscious effort at (public) identity shaping" *(ibid:* 205). Facebook's 'Timeline' thus becomes a self-representational tool to mediate self-expression, past, present and future, as afforded by the interface's functionality. If we consider that social media is constructed through, via and in consideration to a corporate gaze and vested interests, this arguably ensures sociality becomes treated and framed in corporate terms. In turn, it could be argued corporations have hijacked the way in which we express and understand ourselves, and each other by corporatising social and interpersonal relations, behaviours and communication practices. The ethical dimensions of these questions are problematic, as all digitisation has an algorithmic infrastructure. This will arguably shape our possibilities for future sociality, self-understanding and cultural development.

2.3.5 Privacy and Interpersonal Surveillance

According to Whitson and Haggerty (2008: 574), online self-presentation occurs where "citizens are encouraged, enticed and occasionally compelled into bringing components of their fractured and dispersed data double into regular patterns of contact, scrutiny and management". All of these fragmented data representations of the self help construct not only an online identity for users but also a 'health self', which is a construction of a health identity that users may desire others within the community to perceive (Kent, 2018: 62). Surveillance, therefore, becomes a "system of constant registration and constant inspection" (Goodyear et al., 2017: 3). Why then do users feel the desire

to share these fragments of their data selves and what do they gain from such sharing of personal information and lifestyles? It is questionable whether users consider the impact of 'surveillance capitalism', and its entailment of privacy threats and "opaque forms of datafied power and domination" (Kristensen and Ruckenstein, 2018: 3). As Davies (2016: 196) argues, "networks have a tendency towards what are called 'power laws', whereby those with influence are able to harness that power to win even greater influence". The power of influence here, we can align to the platform developers in their prioritisation and capitalisation of surveillance, as well as users' awareness of the important role of the surveillance of others in regard to what they post, where and why. Users' perceptions and management of their own visibility online, and the visibility of others, are tied to shifting understandings of what is considered public and private information. Online communities and social media "organise relations between peers. Not only are interpersonal social ties mediated on an organisational platform, but interpersonal activity also becomes asynchronous. Peer relations become more surveillant in nature" (Trottier, 2012: 320). It then becomes important to consider how the surveillance of others influences users own self-presentation, especially with the continually evolving and shifting socio-technological affordances of both self-tracking technologies and social media. Trottier (2012: 320) argues that, "services like Facebook are intimately tied to both identity and communication; they shape how we are perceived and how we interact with others". Surveillance and visibility, therefore, become an integral practice of interpersonal relations within self-tracking technologies and social media.

Public and private binary distinctions are often insufficient for describing online (health) communities. Interpersonal surveillance is considered a violation, but also as a pervasive condition of social media *(ibid).* This 'intervisibility' (Brighenti, 2010) ensures that interpersonal surveillance is mutual, whereby privacy violations are normalised through social media visibility. There is a 'trade off' between managing privacy and achieving public exposure (Tufecki, 2008; boyd and Hargittai, 2010). Within these online platforms users "put on their daily lives as staged performances where they deliberately use the differentiation between private and public discursive acts to shape their identity. Each construction of self entails a strategy aimed at performing a social act or achieving a particular social goal (van Dijck, 2013a: 212). Therefore, we can understand social media self-presentation as a salient narrative of the technologically mediated life. Georgakopolou (2012: 11) terms this 'breaking news'; the sharing of lived experience as it is happening, a perpetual storytelling of personal or society-wide events from the perspective of the user. Social media provide a platform for providing narratives of our personal and professional lives, which Barbazon (2015: 58) argues: "signifies a blurring of work and leisure, formality and informality, seriousness and triviality". Though there are blurred distinctions between work and leisure, and a context collapse of audiences within online spheres, in terms of mediated interpersonal relationships and communications online, these practices and navigations highlight a literacy and aptitude contrary to current critiques, which argue that social media has 'de-skilled' interpersonal communication practices (Brabazon, 2015). van Dijck (2013a: 210) argues that Facebook and other social media platforms have "pushed the art and science of 'mass self-communication' to a new level". This thesis, therefore, attempts to uncover how self-representation

through language use and feedback within social media communities, influences users' sense of self and identity, and aims to explore how and if this impacts upon health practices offline.

Keen (2015: No Page) takes a particularly dystopian perspective and considers the Internet as structurally parochial: "like a village (…) we're all clustering in these tighter and tighter ideological and cultural networks. There's no serendipity, no stumbling upon random people or random ideas. Everything is pre-ordained; you're served with what you know will suit you". Similarly, Brabazon (2015: 62) argues that the parochial nature of social media informs the communicative practices and interpersonal relations online: "the dominant media of a time influences the type of empire constructed". Although media have always provided a window into the private life of others (Meyrowitz, 1986), Trottier (2012: 321) considers social networks and lateral surveillance as "a product of the domestication of media technology", whereby "surveillance is more than data collection because it relies on mediated relations, profiling and asymmetrical relations of visibility. It is the dominant organisational logic of late modernity" (*ibid*: 320). In this regard, if surveillance and organisational profiling are conditions of contemporary society in the digital age, it can be asked whether interpersonal and lateral surveillance then become accepted as the norm.

2.4 Conclusion

This chapter has critically reviewed the literature, examining health discourses within socio-cultural, economic and political shifts since the birth of the welfare state post 1948 to the current individualised practices promoted in neoliberal societies. Part One of the chapter identified how 'good' or 'bad 'health' is now identified through lifestyle choice, behaviours, consumption and commercialising practices, encouraged and authorised through neo-liberalising practices of individualisation (Foucault, 1984; Featherstone, 1991; Lewis, 2008). Part Two outlined the main arguments held within current literature around self-tracking and health practices. In particular, it identified and explored the regulatory design and choice architecture of digital health and self-tracking technologies, in directing human behaviours and the ethical implications of this. Part Two also identified the self-regulatory approaches advocated through these technologies of 'healthy' lifestyles in managing, dictating and disciplining health choices, which in turn was identified as arguably the dominant practice, achieved through the adoption of these persuasive and coercive technologies. The final section, Part Three, attended to self-presentation theory, addressing how social media's (Facebook and Instagram) socio-technological affordances can be used to sculpt and shape health identity, whilst commodifying personal ties and representations of the self. It also identified how interpersonal surveillance mediates the content that users share, self-represent and use to construct their health identity within social media communities. It also considered that there may be acceptance of a lack of privacy amongst users, whilst arguing that (imagined) peer surveillance may in fact become the key priority for users over wider data mining privacy invasions or consumer targeted marketing issues.

CHAPTER THREE
RESEARCH METHODOLOGY

This chapter discusses the triangulated methods used within the thesis, whereby empirical ethnographic methods of online data capture, interviews and reflexive diaries are combined with textual and thematic analysis. Much literature has speculated on how users' engagement with self-tracking technologies do not reflect on the process of using these technologies (Butt, 2012; Lupton, 2012, 2013; Shahini, 2012; Swan, 2012a, 2013; Quigley, 2013; Waltz, 2012), particularly in regard to how sharing self-tracking data can enable specific self-representations of health and constructions of health identities on social media, and can also influence health behaviours offline. This thesis, therefore, critically explores the use and influence of self-tracking technologies upon participants' self-representations within the context of social media (Facebook and Instagram), and their influence on the participants' offline health practices. To achieve this, the project undertook empirical ethnographic research with 14 participants who self-selected through a call for participants on Facebook and Instagram: seven women and seven men, between the ages of 26 and 49 years, who regularly (daily/ weekly) share health and fitness-related content on Facebook and/or Instagram. These participants included the everyday lay person, those dieting or training for marathons, to those dealing with illness or disease. The types of content shared came in the form of self-tracking data from applications (for example Nike+ or Strava) and devices (for example, Fitbit or Garmin Watch), gym or fitness selfies, or more general 'healthy' self-representations such as food photography. These methods included online data collection, guided reflexive diaries (over three months), and two semi-structured interviews, triangulated with a textual and thematic analysis of verbal (interviews) and written (online data and reflexive diaries) language use, as well as analysis of the screenshots of visual content (images and photographs) shared by the participants on these platforms.

The triangulated and temporal nature of capturing this empirical data and the reflections from participants over a three to nine-month research period enabled intriguing insights and provided unprecedented analytical depth with regards to the processes of self-tracking and social media. These methods have drawn together insights which, despite the small participant group (fourteen) can be representative of self-tracking and social media users more generally, and furthermore, can be seen to reflect wider socio-economic, cultural and political shifts. These neoliberal discourses of self-regulation, individualised health responsibility and self-care, are advocated through the use of these technologies of the self and their associated practices. This chapter will present in detail the methods used, whilst examining their strengths and weaknesses in this field. The final section of the chapter will discuss the challenges and opportunities afforded by the unique triangulation and temporal nature of these methods, whilst identifying considerations for digital ethnography and other methodological approaches in the fields of digital health and self-tracking technologies, and social media.

3.1 Ethics Clearance: King's College London Research Ethics Committee Ref: LRS-15/16-2156

3.2 Participants

1. 'Amy', Female, 27, Professional Singer, Brighton, UK

- Cancer/ chemotheraphy patient, blogs autobiographical narratives of health and cancer treatment. Sharing content on Facebook and Instagram.
- First interview: 24/12/16. Completion and final interview: 24/4/17.

2. 'Lara', Female, 28, Transfer Bus Co-ordinator and 'Jazzercise' instructor, Chamonix, France

- Self-tracking runs and snowboarding, yoga photography. Sharing on Facebook and Instagram.
- First Interview: 01/12/16. Completion and final interview: 27/5/ 17

3. 'Lou', Female, 29, Advertising Account Manager, London, UK

- Self tracking runs (marathon training). Sharing content on Instagram.
- First interview: 01/12/16. Completion and final interview: 28/4/17.

4. 'Jennie', Female, 40, Marketing Executive, London, UK

- Food photography, fitness selfies. Sharing content on Instagram.
- First interview: 20/12/16. Did not complete diary or final interview.

5. 'Sophie', Female, 31, Business Development Manager, Torquay, UK

- Self-Tracking runs (marathon training), food photography and fitness selfies. Sharing on Facebook and Instagram.
- First interview: 19/12/12. Completion and final interview: 8/5/17.

6. 'Eve', Female, 26, Legal Secretary, Maidenhead, UK

- Self-tracking runs, marathon training, fitness selfies. Sharing content on Instagram.
- First interview: 20/12/16. Did not complete diary or final interview.

7. 'Annie', Female, 28, Fitness Instructor, Brighton, UK

- Autobiographical narratives of fitness, and recovery from brain surgery, self-tracking runs, gym and fitness selfies. Sharing content on Facebook and Instagram.
- First interview: 20/12/16. Completion and final interview: 17/6/17.

8. 'Matt', Male, 41, Electrician, Cardiff, UK

- Fitness selfies and bodybuilding photos/videos. Sharing content on Facebook and Instagram.
- First interview: 20/12/16. Completion and final interview: 28/6/17

9. 'Fet', Male, 30, Teacher, Brighton, UK

- Self-Tracking cycling (Strava). Sharing content on Facebook and Instagram.
- First interview: 14/12/16. Completion and final interview: 20/5/17.

10. Ryan, Male, 30, Sales Executive, Ontario, Canada

- Self-tracking of fitness, bodybuilding and fitness selfies. Sharing on Facebook and Instagram.
- First interview: 19/12/16. Did not complete diary or final interview.

11. 'Tim', Male, 34, Electrician, Winchester, UK

- Yoga selfies and self-tracking runs. Sharing content on Facebook and Instagram.
- First interview: 19/ 12/16. Completion and final interview: 1/6/17.

12. 'Roy', Male, 26, Student, Denmark

- Hand-balancer and weightlifter, gym photos/videos. Sharing content on Instagram.
- First interview: 04/01/14. Completion and final interview: 5/4/17.

13. 'Osten', Male, 30, Photographer, Barcelona, Spain

- Food photography and self-tracking runs. Sharing content on Facebook and Instagram.
- First interview: 14/10/16. Did not complete diary or final interview.

14. 'Nigel', Male, 49, Consultant, Bath UK

- Self-tracking runs. Sharing content on Facebook.
- First interview: 28/10/16. Did not complete diary or final interview.

3.3 Ethnography

Ethnography is a style of research, which analyses the everyday social phenomena of human interaction and behaviours in their naturally occurring environment. The strength of ethnography is that it can draw on a wide range of methods, which in combination is termed triangulation (Denzin, 1970). The origins of the term lie in nineteenth-century Western anthropology. 'Ethnography' was a descriptive account of a community or culture (usually located outside the west) (Hammersley and Atkinson, 1983: 1). During the twentieth century, anthropological ethnography came to be used within some areas of Western sociological research. From the 1920s to 1950s the 'Chicago School' developed an ethnological approach to studying human life and cultural patterns (Hammersley and Atkinson, 1983). From the 1960s onwards, different forms of sociological research adopted these developments and transformed the field, moving from historical and textual focuses, and traditional social science methods of analysing media and effects, towards making sense of audiences' experiences and consumption in the context of their environment (Murphy and Kraidy, 2003; Morely, 1980; Hammersley and Atkinson, 1983). The convergence with cultural studies approaches included "the notion of the constructed nature of the cultural" (Gray, 2003: 24). Therefore, ethnographic methods perceive and enable the identification of culture, as no longer situated geographically, but as a set of ideas and beliefs circulated by a community (Anderson, 1983; Calhoun, 1980; Parks, 2011).

Ethnographic methods come from the philosophical paradigm that "privileges the body as a site of knowing" (Conquergood, 2009: 180). This paradigm identifies that cultural meaning is created through social behaviours and interactions, highlighting the importance of the social context from and space in which the interaction and analysis takes place. Within this thesis, these 'spaces' are participants' engagement with self-tracking technologies and social media platforms, which they survey others through and themselves share upon, as well as the reflexive diaries in which they write to reflect upon and make sense of their technological 'health' management. Public perceptions are near impossible to capture within small-scale ethnographic projects. However, this thesis explores in-depth health behaviours and representations (in both online and offline spheres) of a small representative group of 26 to 49-year-olds. The thesis does not assume that this ethnographic research will fully identify the influence of self-tracking technologies, social media self-representations, or 'health' behaviours on a mass scale. However, ethnography does enable small-scale projects to provide representative findings.

Ethnography can be seen as offering ambivalent meanings, in that it is both the methodological approach to a research discipline, and the written product of that research (Bryman, 2001; Conquergood, 2009; Clifford and Marcus, 1986; Hammersley and Atkinson, 1983; Van Maanen, 1988). Ethnography is concerned with the construction of 'local knowledge' (Geertz, 1983: 7), examining "all aspects of social life, or all facets of a social setting" (Mackay, 2005: 134). This is achieved through varying levels of immersion by the researcher into the lives of the participant(s), to gain a contextual understanding of the spaces in which interactions, behaviours and activities are established *(ibid),* thus revealing the 'taken for granted' aspects of everyday life (Brewer, 2000). This research however, does not 'observe' or 'participate' with these subjects in their everyday lives like many earlier ethnographical methods. Rather, it encourages participants to engage with their own conceptualisations of health, technology use and everyday practices through interviews and reflexive diaries. In particular, the reflexive diaries were used to tease out everyday interpretations of daily health management. This afforded both the participant and the researcher an engagement with and better understanding of the subjects' everyday health-related practices.

Ethnography "allows us to situate consumption practices and to contextualise media use in everyday cultural life" (Mackay, 2005: 131). However, media ethnography has been criticised for undertaking 'hit and run' analyses (Murphy and Kraidy, 2003: 12), contributing to "partial truths" (Moore, 1993: 4). Utilising a number of methods over a three to nine-month period enabled the researcher to cross-reference data and to ensure that the analysis did not fall victim of providing a partial investigation of ethnographic accounts (Murphy and Kraidy, 2003). Analysis of the online content (provided as a screenshot of daily/weekly sharing), enabled an examination of a carefully curated self-representational text of their bodies, health-related activities and lifestyles. Analysis of the interviews and reflexive diaries enabled an examination of how participants and online communities interpreted that text through 'lived experience' (McRobbie, 2003 [1992]), in their individual everyday lives, both online and offline. The long-term temporal nature of these triangulated methods helped counter and limit any researcher assumptions made prior to data

collection and to grasp cultural understandings through many layers of data, thus improving the analysis of the data (Brewer, 2000). No one research method will provide the scope of findings one would hope to achieve, and we need flexibility in order for us to be surprised by our research (Willis, 1980). The triangulation of methods and data collection provided a wealth of data and research findings, of which not all could be included in this thesis due to word limits, but will form the basis of future research outputs (including publications) post thesis submission.

Combining a variety of research methods over an extended period of time enabled the researcher to identify a continuity in examining the participants' lives, contributing to a comprehensive insight into their meaning-making processes and ensuring that thorough and detailed conclusions could be drawn (Karl, 2009). 'Getting to know' the participants in the first interview, examining their changing lives and practices over a three-month period, then contextualising the last three to nine months of changing practices and engagements offered the researcher a great insight into their lives. In turn, triangulating data offered the option to analyse less participants but in greater depth over longer periods of time (Karl, 2009). Although the participant group may be small (fourteen), it is not considered a detrimental limitation of the project due to the wealth of data, research findings and analysis that it provided.

As demonstrated in the analytical Chapters (Four to Eight), it was possible to reinterpret particular data or use different methods of data collection in relation to different research questions. Data could be re-used with different conceptual focuses to unearth new avenues of analysis, or identify new perspectives (Karl, 2009). For example; how these 'technologies of the self' enabled different perceptions and understandings of what 'health' meant to them (Chapter Four), how participants related to and engaged with their bodies and sense of health identity (Chapters Four to Eight), how they also enabled empowering and controlling self-surveillance for self-tracking purposes (Chapters Five and Six), how these technologies drew in the gaze of the community and motivated new and dynamic health-related behaviours in performance for the purpose of community surveillance (Chapter Seven), and lastly, how these 'technologies of the self' enabled the construction of an idealised 'healthy' identity on social media, but over time how these practices became addictive and overwhelming, leading some of the participants to detox from their digital monitoring or quit self-tracking and social media altogether (Chapter Eight).

3.4 Digital Ethnography

The strengths and weaknesses of these methodologies cannot be examined without attending to the approach of 'digital ethnography'. In response, the next section considers some aspects of 'digital ethnography' related to the methodologies used in this thesis. It is important to recognise at this stage, however, that this thesis does not consider itself a traditional 'digital ethnography' in the sense that it does not examine the digital platforms themselves as ethnographic sites to be analysed. The analysis instead centres around the participants' interpretations of these sites. However, the platforms, applications and devices (self-tracking technologies and social media) in

which the participants are engaging, are of course digital; self and peer surveillance operates (post the imaginary perceptions of participants) through these digital spaces, and the constructed representations of health identity (screenshots of shared content) are curated and documented on them. However, rather than focusing in detail upon the digital platforms themselves, this thesis analyses the participants' interpretations of their usage.

Digital ethnography builds on 'pre-digital' or traditional ethnography. As has been argued in some existing literature, analysing new online social spheres offers a challenge for ethnographers, due to their limited accessibility and visibility as modes of communication (Murphy, 2008; Postill and Pink, 2012). In the process, interpretation and participation are "spatially and temporally transformed" (Mackay, 2005: 140). In this respect, digital ethnography has received criticism for being too text and content laden (Karl, 2009). The challenge for ethnographers is to analyse new (online) social spheres. The interpretative nature of ethnography could be considered a weakness, as it is a one-dimensional research methodology *(ibid).* However, in recent years there have been attempts in different disciplines to overcome assumed interpretative obstacles and to examine how online practices and communications, as well as how the 'real' (offline) world is shaped and influenced by digitalisation. In an attempt to examine these temporally and spatially challenging spheres, 'digital ethnography' (Murphy, 2008) has come in many different forms: 'virtual ethnography' (Hine, 2000), 'cyberethnography' (Robinson and Schulz, 2009), 'internet ethnography' (Boyd, 2008; Sade-Beck, 2004), 'internet-related ethnography' (Postill and Pink, 2012), 'ethnographic research on the internet' (Garcia et al., 2009), 'ethnography on the internet' (Beaulieu, 2004), 'ethnography of virtual spaces' (Burrel, 2009) and 'discourse-centred online ethnography' (Androutsopoulos, 2008). Regardless of the many labels given to 'digital ethnography', the common indicator in all these methodological approaches and the approach of this thesis, is that they all employ a recognition of ethnography in the research process, as well as in the analysis of some form of online data.

Ethnography, within the methodological approach of this thesis, does not examine the digital through the mass collection of data. In the context of this thesis's research questions, that would be problematic, as ethnographically speaking, that data is taken out of context. Rather, the participants' representations of themselves and their 'health' through the online content shared is contextualised through the other methodologies of interviews and reflexive diaries. This triangulation, therefore, also takes into consideration the ethnographic priority of context being an interactional achievement (Blommaert, 2007), which is particularly important in the context of the 'datafication of life' (Ajana, 2017: 14). These practices transcend spatial and temporal boundaries, where interaction within social media and online communities' feeds back into participants' daily lives. Therefore, analysing 'online' spheres in addition to using 'offline' ethnographic methods actually provided huge scope, in terms of being an adaptable method of data collection in a complex world of digitalisation and globalisation. Therefore, a one-dimensional digital ethnography capturing only online data, in regard to this thesis, would not attend to the complex dynamics of

our blurred and combined online and offline (digital) worlds. It would also remove context and make such an analysis of these types of communications incredibly limited in scope.

This thesis, therefore, does not position itself as solely a 'digital ethnography', as it perceives this term as too limiting. Indeed, it 'exoticises' online data and draws unhelpful distinctions between 'online' and 'offline' communications; presenting these as overtly challenging or difficult to capture or analyse (Georgakopoulou, 2013). Simply examining online data limits context within its analysis and removes recognition of where it came from; it can only speculate as to 'why' it was produced, without uncovering the practices and processes users employ to produce such content or understand the 'back door' to put it in Goffman's (1959: 22) terms. Digital ethnography, therefore, celebrates the capturing of online data as a way of providing insights into digital spheres, without attending to the recognition of ethnography and online data, platforms and users as an interactional and participatory event. This thesis does not draw a distinction between online data and representations made by participants as separate from their offline worlds. It contends that the online and offline modes of communication are different in regard to the methodological capture (interviews, reflexive diaries and online content), but not in terms of the analytical examination of these methods. Textual and thematic analysis is utilised just as effectively in each different mode of communication. The 'digital communications' are analysed through the online data captured, which enables a nuanced understanding of how participants interpret and use these spaces to understand and examine their health, their bodies and their identities, through the methodologies of interviews and reflexive diarising. This enables a comprehensive understanding of the participants' life worlds and not just 'digital slices' of them (Varis, 2014). In this thesis, social media and other online environments are not seen as separate contexts, detached from other 'offline' spheres of life. This research and the methodological approach is multi-sited, as social and cultural spheres always are. It provides an examination of broader online-offline dynamics, recognising digital spaces as being entwined with the offline world.

3.5 Participant Recruitment

Fourteen participants self-selected themselves through a call for participants on Facebook and Instagram: seven women and seven men, between 26 and 49 years of age. The call for participants specified regular (daily/weekly) users of Facebook, and/or Instagram who share health and fitness-related content. See below screenshots for the Facebook (Fig. 1) and Instagram (Fig. 2) 'calls' that were circulated on the researcher's personal accounts multiple times between September 2016 and January 2017. The 'call' included a prompt to 'please share', which ensured both 'calls' on Facebook and Instagram were re-shared and circulated by members of the researcher's online networks. By January 2017 all participants were recruited. Nine participants who responded to the call took part in the entire research study (first interview, reflexive diary, final interview), 'Nigel', 'Osten', 'Ryan', 'Jennie' and 'Eve' could not take part in the reflexive diary and final interview due to personal reasons but did conduct the first interview.

Fig. 1. 'Call for Participants' on Facebook September 2016 – January 2017

Fig. 2. 'Call for Participants' on Instagram September 2016 – January 2017

In resonance with Foucault's (1988) work, rather than focusing on the marginalised, this thesis sought to examine the lay, everyday person's use of self-tracking technologies and social media in the self-representation and management of health. Recent literature has attended to the use of these technologies from the perspectives of people in different contexts, where their use is mandatory: for example, how patients, school children, and employees manage health, as well as examining in detail specific applications and devices voluntarily adopted by users (Ajana, 2017, 2018; Goodyear et al., 2017; Ruffino, 2018; Moore et al., 2018; Till, 2018; Rettberg, 2014, 2018; Kristensen and Prigge, 2018; Spiller et al., 2018; Fotopoulou and O' Riordan, 2016; Lupton, 2014, 2016a). However, this thesis examines the pervasiveness of these practices for the everyday user; how the everyday person manages health and constructs health identity, and how these practices impact both online and offline health-related behaviours. Furthermore, as the participants volunteered, this focus on 'laypeople' provided an opportunity not to focus on gender, age, class or race as a methodological defining parameter for the analysis. The participants were neither members of a health or self-tracking 'community', nor did they 'have' to use devices in their workplace, for insurance or professional purposes (to gain an income from their use as 'influencers' for example). These individuals voluntarily imposed different forms of self-tracking (Lupton, 2016a) upon their health and bodies, and voluntarily shared health and fitness-related data on social media. This led to a wide variety of content being shared, which came in the form of self-tracking data from applications (for example Nike+ or Strava), and devices (for example, Fitbit or Garmin Watch), gym or fitness selfies, or more general 'healthy' self-representations such as food photography or lifestyle representations (scenic locations visited whilst exercising, for example).

3.6 Semi-Structured Interviews

The critical review of the literature examined how the social value attached to health and beauty has risen dramatically within the second half of the twentieth century (Mennel et al., 1992). Given the personal and sensitive nature of the health-related content, personal reflections and representations of the body under analysis, establishing trust between researcher and participant was a key consideration for this research project. Any geographical limitations (participants were located abroad and throughout the UK) were overcome through interviewing over Skype; 'a telecommunications application software product for internet video chat and voice calls' (Skype.com, 2018). It was hoped that by conducting these interviews in their homes (via Skype) the participants would be as comfortable as possible (Karl, 2009). Establishing trust between researcher and participant therefore, was an ongoing consideration as well as being a rewarding part of the ethnographic study. Due to the temporal nature of this three to nine-month research period, regular contact was kept via email and enabled the building of trusting relationships between participant and researcher *(ibid).* However, it is important to be aware that "no matter how established and trusting the relationship between researcher and participants, there are always barriers and limits to what we can observe and capture in space and over time" *(ibid: No Page).* Therefore, Brewer (2000: 29-186) advises that researchers must maintain a balance between being an 'insider'; 'going native' and being an 'outsider'. It is important to maintain a professional distance, but not to lessen a rapport, which might make participants inhibited and

unable to relax when engaging with the researcher. This was felt to be a particular challenge when discussing personal issues, disease, ill health or trauma, with the participants. In turn, supportive strategies were adopted by the researcher as a means of demonstrating empathy towards the participants, as opposed to providing support or advice. The strategies entailed offering sympathetic comments when participants' discussed traumatic health-related events (such as diagnosis of disease, surgery or injury), without offering guidance or advice in suggestion of how these experiences could be handled or dealt with personally. This was an ongoing consideration for the researcher throughout the time spent with participants. The priority was to minimise any advice in regard to health management strategies which may be perceived as advocacy from the researcher to the participant, whilst maintaining a warm and trusting environment.

Undertaking interviews for research purposes presents challenges to ethnographers, with relation to the issue of bias. Participants might be influenced by the researcher and mirror the language used (Brewer, 2000). Similarly, social clues of the interviewer (age, gender etc.) can affect and potentially create anxieties or inhibitions within the participant's responses (Brewer, 2000). The researcher, therefore, interpreted and analysed responses critically and reflexively to identify any researcher influence upon responses and subsequent findings. The interviews identified health choices whilst drawing attention to individual feelings, decision-making, and subsequent behaviours, which enabled the identification and in-depth analysis of individual health practice. Interviews were an important contextualising method due to the at times de-contextualising nature of the reflexive diaries (Meth, 2003).

In light of the literature surrounding self-tracking technologies and social media, which suggests that it enables connectivity and online support, interviews were selected to enable discussion and exploration of individual perceptions and self-reflections of these technologies, associated health behaviours and community engagement in a broader context. The choice to use semi-structured interviews was to provide a thematic guide to elicit responses to set questions, but also to explore individual understandings, interpretations and engagement with dominant themes, which were informed and identified by the theoretical framework from the literature reviewed, and from pilot interview findings. Semi-structured interviews enabled ideas, concepts and topics to be expanded upon by the participants. In turn, the interviewer was able to respond to and tailor questions accordingly, in line with the research questions. These key themes focused on identifying participants' conceptualisations of (ill/physical/mental) health, sharing, social media, self-tracking, morality, community, feedback, surveillance and sociality. The researcher encouraged the participants to expand upon autobiographical reflections raised outside of the set questions, tailoring questions 'in the moment' in response to comments made, which were relevant to the research questions, whilst drawing the focus back to the key themes and set questions (outlined below). The relatively short time period for interviewing (30-45minutes), however, dictated the return to the set questions if the discussion shifted off topic. This also provided a reasonable timeframe from which to steer the discussion (if participant responses had shifted off focus) without cutting the participant off mid-flow. Tactfully steering the interview was a careful

consideration for the interviewer, to avoid abruptly changing the topic, as this may cause participants to perceive their response as uninteresting (or oversharing), causing embarrassment or inhibition, and potentially limiting future responses. This was an important consideration and interviewing tool to ensure speaking about delicate and personal issues such as health, the body and personal image was carefully and empathetically managed.

The first interview gave the participants an overview of the project and was used to tease out initial reflections around health behaviours before undertaking the reflexive diary. Its purpose was also to aid participants' thought processes, and to encourage them to engage with (or challenge) their own assumptions or interpretations of key themes and concepts, which in turn aided the written dairies. The final interviews were also used to contextualise diary entries (Meth, 2003), and to discuss any misunderstood language use. It drew together the narrative(s) that arose from completing the diary over three months and explored topics outside of the guided reflexive diary questions. An integral aspect of the final interview post-reflexive diary period was to explore topics, understandings or interpretations, which arose from the participants' process of completing the diary over time. In some cases, this was almost nine months later, ensuring an analysis of the participants' changing habits, practices and broader shifting social media etiquettes. Therefore, once all the participants' reflexive diaries were completed these were textually analysed (from the written language and the visual data) to identify the themes and questions to be addressed in the final interview. The final interview covered themes identified from analysing all the reflexive diaries and first interviews, as well as specific questions tailored to each participant's individual diary entries. It also provided a deeper understanding for the researcher of the significance of the events or observations made by the participants in their reflexive diaries and everyday lives. This aided the analytical process, allowing the contextualisation of the individual accounts within a broader socio-economic, political and cultural context.

3.7 Reflexive Diaries

Reflexive diaries are acknowledged as an underused method in media studies research. They enable "autobiographical reflections about the participants' life worlds" (Kenten, 2010: No Page). The motivation to include a reflexive diary was to enable participant engagement with the process of using these technologies, whilst providing access to the everyday ways in which users become aware of their health decisions and how this related to their engagement and self-representation on social media. As Plummer (2001) and Kenten (2010) argue, diaries enable a focus on the aspects that shape participants' lives, rather than on the more visible or easily identifiable aspects of health behaviours, by providing a crucial link between the private mind and public affairs. In particular, the reflexive diaries were used to tease out the participants' everyday reflections and interpretations of daily health management.

Reflexive diaries enabled the participants to reflect upon their self-tracking use, social media engagement and sharing, 'in the moment' or soon after the 'event' (decision-making process or sharing online). This provided detailed insights into constructions of the self, which would have otherwise been impossible to answer and identify through interviews or viewing online content alone. The guided diaries therefore, were constructed to elicit responses to set questions. Indeed, the participants were invited to expand upon topics not outlined. Kenten (2010: No Page) describes how a diary can be designed "but the ways participants respond to these styles will vary". My research draws upon another strength of reflexive diaries in empowering the participant (Meth, 2003), as they become both observer and informant (Zimmerman and Weider, 1977). The temporal nature of completing these diaries twice a month over three months, totalling six entries, and each time answering the same questions, encouraged the participants to engage with their understandings of how their processes and practices had changed over time (if at all). This also enabled them to reconsider the same concepts, such as 'health', sharing, self-tracking, community, surveillance and sociality, to uncover for themselves how initial assumptions might be challenged or overturned by revisiting these same questions over a three-month period. As Kenten (*ibid*) explains: "the narratives produced (…) create access points into their everyday lives". The questions were tailored to provide insights into different health-related experiences by directing the participant to focus their attention upon health decisions and social media behaviours, to increase their visibility and the significance of their everyday activities, which might be otherwise considered mundane or irrelevant. The diaries were provided via email on A4 word documents (see, 3.7.1 Reflexive Diary Template). The diary template acted as a guide, including questions and suggestive answers to help participants who may have been feeling overwhelmed or intimidated by the blank page. In essence, they acted as a form of encouragement. However, it must be recognised that this could be considered a limitation of the methodology, in that this could guide answers or encourage the language used by the participant to mirror the language used in the diary questions. Therefore, the level of integration as a researcher was one of the biggest challenges, particularly in terms of language use, given that textual and thematic analysis was the methodological approach to data analysis. In overcoming this, the researcher maintained a continuously self-reflexive approach throughout every stage of the analysis, identifying their own cultural assumptions, whilst not drawing too much significance from similarities in language use (between researcher and participants), to prevent influence over findings (Karl, 2009).

Diary reflections unearthed individual observations concerning health behaviours and perspectives upon the process of how and why participants used these technologies, how this made them feel and if this influenced subsequent behaviours. The repetitive task of completing the diary every month enabled continuity, and a reflexive journey for participants in identifying how, over a period of time, health behaviours, practices and online community engagement changed (if at all). For example, analysing user data from these devices, even in combination with interviews, would not have enabled the fascinating and detailed everyday perspectives and initial reactions to the use of self-tracking devices, content shared or social media community (dis-)engagement or feedback. Interviews would have provided a discussion and reflection of these processes and relational

aspects, but likely 'sometime after the event', whereas reflexive diaries were completed by the participants on the same day as the content shared (on different days of the week over the three-month period). This provided a close reading, reflection and analysis of the day's health 'events', both for the participant and the researcher.

The participants posed some questions to the researcher via email during the reflexive diary period, particularly Tim, who was unsure what 'sense of self' meant and how his sharing practices may or may not contribute to this. The researcher would always respond by asking: "What does it mean to you? You cannot interpret these questions incorrectly. Just answer with what you think, feel and reflect upon". The goal and hope here was to minimise researcher bias or influence, in an attempt not to be too invasive or to guide the participants' responses. Participants also advised the researcher of times when they had not shared anything for a few days, weeks or even a month, due to an injury, ill health or a desire to digitally 'detox'. The first time this happened, most participants initially decided they would not complete the diary on these days. Again, the researcher advised participants to still complete the diaries. If they were not enacting 'healthy' practices and not sharing for any reason, it was still of interest to examine how their decision-making and health practices changed and evolved over time.

All of the participants enjoyed completing the diaries. They perceived the temporal nature of engaging with and reflecting back upon their health-related behaviours and sharing practices as a tool to 'understand myself better'. This also provided them with a chronological and guided diary of a period of their lives in which many of them experienced personal life changes or reached personal goals: from recovering from life-threatening surgeries, to relocating (abroad or to another city within their home country), to refining a specific skill such as achieving certain yoga poses, to completing their first marathon. Whilst trying to avoid framing the benefits of taking part in this research as celebratory personal revelations, many of the participants reflected in the final interview on how this process, over such an extended period of time, encouraged new personal insights (about themselves) or lifestyle changes, (sometimes 'for the better'). For example, some participants who struggled with their over-regulatory self-policing of individual health (once this was personally recognised), at times managed to resist the dictatorial frames imposed by themselves and these technologies. For others, it simply highlighted their 'unhealthy' relationships with food (eating disorders) or low self-esteem/ body image issues. Some simply found it frustratingly time-consuming, but thankfully for the researcher, continued with its completion as they had 'committed'. The many methodological influences and participant interpretations of completing this research study, and the ways that it informed how they engaged with the technology, their health and the methodologies, are analysed in detail in the first of the five analytical chapters: 'Health Identity and Methodological Influences'.

A key methodological consideration and potential limitation of using diaries for research purposes is the recognition that writing diaries for consumption, unlike documentation for personal recollection, may encourage participant self-censorship. However, in relation to other ethnographic participatory methods, Kenten (2010) argues that self-censorship is as easily enacted within

interviews or focus groups, as all methods of data collection can be to an extent considered partial. Kenten *(ibid)* and Verbrugge (1980) argue that diaries offer the potential to provide a more accurate account of memories or events, due to the regularity and relative immediacy of the recollection in minimising memory errors. Self-censorship, however, can become transparent and easily identifiable through the continuity enabled through textual and thematic analysis of written content, especially when undertaken over an extended period of time.

3.8 Online Data Capture – Screenshots

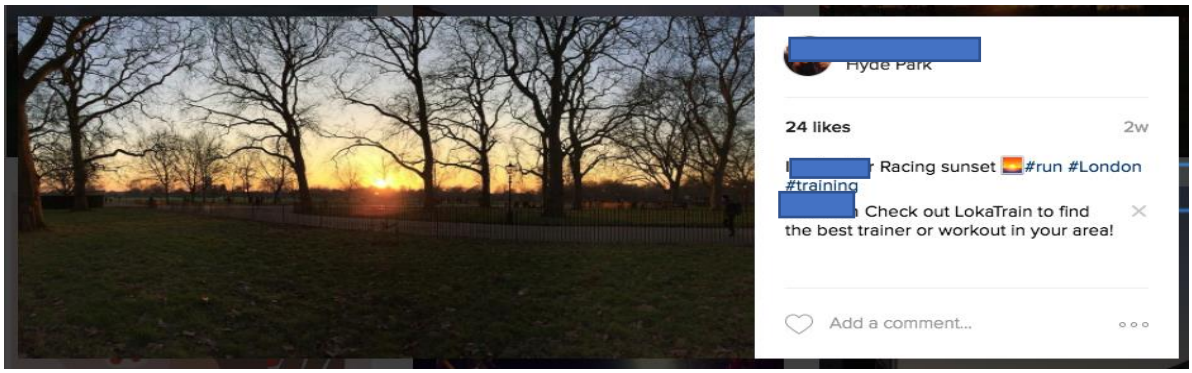

Fig. 3. Screenshot of Participant's Shared Content

Brewer (2000: 72) advises that personal documents are useful data collection methods because they are 'not contrived' (as the participants provided it without awareness of research). However, within this thesis, the self-representations of health data and online content could be 'contrived' as they were created and produced by participants during the project, with an understanding of the project's aims and objectives. The reflexive diary entries were captured on different days of the week to examine how and if health and sharing practices differed on these days, for example, during 'free' or weekend time, or during the working week (for those that had a 'typical 9-5'). However, whilst the participants recognised the diary as a labour-intensive process that was sometimes a chore, its completion was often motivated by 'commitment' to the project. None outlined that they shared their online content 'for the sake of the project'. The sharing of such content can be conceived as a normalised habitual practice already integrated into these participants' everyday lives, and therefore not perceived as an additional 'chore' in the way the reflexive diary was. Furthermore, the participants did not reveal (or admit) that the content they shared changed for the purposes of this research project. Fortunately, the researcher was given access to each participant's social media account and was permitted to review previous content for continuity purposes. This content was not referred to or analysed in the empirical work, but was briefly surveyed to identify continuity of content (or lack of). From this, the researcher identified how online data did not differ from before the beginning of the reflexive diary period. However, after the first post, the content participants shared did differ or cease. This was due to their reflections, drawing them to digitally detox or change what they shared about their bodies and health due to personal insights gained from the reflexive diaries (for example, not wanting to

'overshare' or represent certain 'health identities'). This process and the subsequent changing self-representations are analysed in the following five analytical chapters (Four to Eight).

3.9 Textual and Thematic Analysis

The aim of this thesis is to explore the influences of self-tracking technologies and social media upon self-representations of health, as well as to examine the influence of this upon offline health behaviours. To identify these influential relationships, textual analysis was chosen as the critical method from which to examine the characteristics, content, structure and functions of the messages contained in the participants written (reflexive diaries), verbal (interviews) and visual texts (screenshots of shared content) (Bryman, 2016; Punch, 2014; Mason, 2002). These findings were then examined to extract core themes that could be distinguished between and within the three different types of text (Bryman, 2012). This was then thematically organised by and within each chapter within the thesis. As Punch (2014: 196) argues, "words and their meanings depend on where they are used, by whom and to whom (…) therefore meaning varies according to their social and institutional setting", therefore a key consideration for this textual analysis was the selection of the appropriate types of texts to be analysed and from what setting. For example, if we analyse texts, without considering its social context it can be deprived of its meaning, limiting the analytical process. Therefore, this thesis analyses its texts (interviews, diaries and online/visual content) whilst providing context of the individuals motivations for sharing content and motivations of how they approached the interviews, diaries and subsequent reflections. The textual and thematic analysis of the empirical ethnographic data gathered (interviews, reflexive diaries and screenshots of shared content) provided "access to how the social world is lived, not simply how people talk about it" (Silverman, 2014: 213). This triangulation of data, like the Internet, transcend physical and spatial boundaries in communicative terms, and enable insights into communicative practices that may be geographically distant (Mackay, 2005). Gray (2003: 20) highlights how language is arbitrary, as "it operates as a system, rather than being linked to the objects it describes, and its use relies on shared social and cultural convention". The subjective nature of language raises challenges for ethnographers, particularly in regard to the challenging nature of interpreting 'reality' (Gray, 2003; Hammersley and Atkinson, 1994; Myrdal, 1969). A thorough understanding of how language operates within its social context, can provide an antidote to subjectivity, especially given that all interview transcripts, reflexive diaries and online data were analysed together at the time of receipt, to ensure continuity.

Given the dominant role language and representation plays in articulating and providing boundaries of ideological regulation, of the body and mind, and of individual desires and behaviours (Foucault, 1984), textual analysis provides the critical close-reading method to analyse participant responses and reflections, language use and visual representations of 'health' and the body. Texts produce forms of knowledge, which help individuals and societal groups to make sense of and construct their environment, constructing social norms and behaviours (Willig, 2001). The analytical approach of this thesis is to evaluate 'social practices' identified and articulated through

autobiographical narratives in relation to health practices, which are embedded within power relations (Fairclough and Chouliaraki, 1999). The flexibility of textual and thematic analysis further enables its application within different ethnographic methods. Within this thesis, written language (within online data capture and reflexive diaries) and verbal use (within interviews) can be analysed with a consideration of where the participants' responses came from, in response to broader socio-cultural/political spheres and rationalities. Similarly, textual and thematic analysis allows for the historicising of social practices over time. The capture of empirical research over a three (to nine-month period, between first and final interviews), provided an insight into language use during that period, as well as shifting individual and social practices over time. This was analysed in relation to the timeline of engagement, which enabled a reflection on how responses, practices and behaviours online and offline, changed over time. This enabled a further exploration of shifting social practices and their relationship with disciplinary (neoliberal) discourses of power and control, arguably advocated and encouraged through evolving social media use and socio-technological affordances. As Varis (2014: 4) astutely observes: "From an ethnographic perspective, studying language means studying society and larger-scale socio-cultural processes, and making a distinction between the linguistic and the non-linguistic is seen as a fundamentally artificial one". Therefore, textual and thematic analysis as a method provides adaptable utility to examine the multi-sited and multifaceted digital and non-digital spheres within this thesis, in particular, to ensure that "technical properties of replicability and scalability, linguistic and more broadly semiotic material is quickly and easily mobilised, recontextualised and re-semiotised" (Varis 2014: 4, see also Georgakopoulou, 2013; Leppänen et al., 2013; Rymes, 2012). For example, participants referred to the significance of what content they placed on Instagram in opposition to Facebook, and why. Furthermore, the role of context collapse, which refers to the social networks participants have on different platforms, allows participants to engage with individuals from different aspects of their lives (Marwick and boyd, 2010). For example, Instagram was considered 'more private' (including 'closer' and fewer connections such as friends and family) with Facebook determined as a more 'public' space with broader networks (for example, friends, family, family friends, colleagues, acquaintances etc.). Therefore, deliberations between what content went on what platform (as well as balancing between the two) was a key ongoing consideration for participants, especially when it came to sharing visual content representing their health and bodies, as this made often for "complex and unpredictable uses, reuses, trajectories and uptake" (Varis 2014: 4). Unknown trajectories of participants' content, particularly fear of unexpected surveillance (being viewed by those outside of the participant's network) was a key individual determinant and technological mediation as to what types of visual content were uploaded and where.

Textual and thematic analysis, in this thesis, is used as a tool to analyse participants' curated health-related content, which they uploaded on Facebook and Instagram. As outlined, this includes self-tracking data from applications (for example Nike+ or Strava) and devices (for example, Fitbit or Garmin Watch), gym or fitness selfies, or more general 'healthy' self-representations such as food photography. Therefore, these research methodologies enabled layers of analysis not attainable had the analysis focused solely on the image itself. The reflexive diaries, for example, provided

insights into the images' carefully curated construction from the perspective of the participants. As Mason (2002: 108) identifies:

> In a more interpretive sense, (…) documents, visual images, objects, visualisation, and so on need to be 'read' and interpreted in the context of, for example, how they are produced, used, what meanings they have, what they are seen to be or to represent culturally speaking.

What was useful about the textual analysis in this regard, is that the reflexive diaries at times afforded the researcher knowledge of the participants' 'intended' message, with respect to how they wanted such online and offline representations to be interpreted and how then these representations would be perceived by their social media communities. Additionally, this textual analysis also enabled an investigation of speculative interpretations related to how the image may actually be received by the community (or not), and the social connotations related to the way it was curated. As Mason (2002: 105) argues, "Memories, dreams, thoughts, plans, may thus be visual but not visible. This directs our attention to how the visual is embedded in the social, how it works, how we work with it" calling for methodological creativity in our research approach and in how this thesis grasps the social, political and cultural context of the data in the textual analysis. Therefore, the final interviews contextualised participant reflections on image construction and representations of health and identity. This enabled an examination of how it was received over time, and in turn how this affected their sense of self and moulded future considerations of self-representational content. The triangulation enables different readings of the same image in different contexts and through different analytical lenses, enabling interpretative flexibility, whilst remembering that texts (both verbal, written and visual) are always constructed (Mason, 2002).

As will be demonstrated through the findings presented in the five analytical chapters (Four to Eight) this attends to the digital spaces analysed beyond technological influences. However, it also highlights how "ideological manoeuvrings (...) Algorithms, protocols, and defaults profoundly shape the cultural experiences of people active on social media platforms" (van Dijck, 2013b: 32). Such a triangulation of these methodologies therefore, provided a detailed examination of evolving contextual interpretations of health self-representation and health management over time through the use of digital technologies. It also enabled a consideration of how those contextual complexities changed participants' communication practices over time, and highlighted the unintended consequences (related to audiences and meaning-making processes) of these inherently surveillant, curated and representational practices.

3.10 Conclusion

This chapter has explored in detail the strengths and limitations of the methodological approaches of this thesis. As argued, interpretation is the most significant challenge and strength of ethnographic research. As Hammersley and Atkinson (1994: 254) observe: "there is no perfectly

transparent or neutral way to represent the natural or social world". Therefore, from the different approaches ethnography can harness, there is no "single philosophical or theoretical orientation that can lay unique claim to a rationale for ethnography *(ibid)*. This means that flexibility is at the fingertips of the ethnographer. Interpreting culture fairly is a true skill as "human phenomena do not arrange themselves obligingly in types but, rather, afford us the spectacle of endless overlapping" (Henry, 1971: xv-xi). Therefore, this thesis does not consider the supposed 'challenges' of digital ethnography as anything 'new' in terms of analysing cultural and social phenomena. As Hine (2013 [2005]: 9) argues, in line with the ethnographic commitment to reflexivity: "the question is much more interesting, potentially, than whether old methods can be adapted to fit new technologies. New technologies might, rather, provide an opportunity for interrogating and understanding our methodological commitments". The new types of communicative environments, which digitalisation presents, simply afford researchers new interactive spheres from which to identify and analyse human decision-making processes around health, and the influences of technology, ultimately providing a contextual depth which would be limited and potentially unachievable without the self-representational affordances of both self-tracking devices and social media. The real challenge and strength of ethnography is to confront the "(im) possibility of representing others" (Probyn, 1993: 61). This thesis negotiates these challenges by acknowledging the arbitrary nature of language and interpretations of behaviour. From the 'back door' analysis achieved through the interviews and reflexive diaries, to the 'front door' performativity of the curated online content (Goffman, 1959), these methodologies enabled an investigation of how participants' language use and health practices were shaped by political and socio-cultural conceptualisations of 'health', as well as how they interpreted their understandings representing healthy behaviours. Therefore, it is imperative that ethnographers view culture, human interactions and behaviours as a product and indicative of the culture we live in. However, it should be acknowledged that these social practices constantly develop, overlap and redefine themselves, and do not arise in a neat sequential fashion. Rather, such phenomena can be analysed through multiple spheres.

The methodologies used in this thesis are flexible and adaptive, drawing on the strengths of ethnographic approaches and digital ethnographies. The participants all asserted that they were committed to tracking, monitoring and sharing their health-related behaviours. Yet, life unsurprisingly at times prevented this cycle of engagement with these technologies. This resonates with Kristensen and Ruckenstein's (2018: 2) assertion that "self-trackers define and refine the limits and aims of self-tracking (…) everyday lives are characterised by volatile and less stable inter-relationality with self-tracking technologies which might be rejected, ignored, forgotten, tampered with, or used sporadically and irregularly". When life prevented these processes, the reflexive diaries enabled an examination of practices or inactivity related to health management and technological use, regardless of what the participants were able to 'achieve' in their daily lives. The interviews allowed the participants to engage with broader and contextually informed ways of understanding what 'health' meant to them, why they made the decisions around health that they did and how these practices and understandings shifted and evolved through changes in their

personal lives, as well as through reflecting in their diaries. The temporal nature of this methodological approach enabled a broader examination of these practices, and in particular technologies' role in their lives over a nine-month period. Learning, optimising and improving for participants became a continual cycle of enactment and desire (Viseu and Suchman, 2010). Yet, this was not solely down to technological use (as considered before the research period), but the role of the methodologies in engaging participants in this cycle of self-evaluation. Methodologically, as with any ethnography, participants self-selected and therefore, those who volunteered were likely to have held an inherent interest in self-analysis. Whilst these methodologies enabled supportive and enlightening 'self-discoveries' for the participants, like the self-tracking technologies and competitive practices enabled on social media, they also triggered a profound recognition of their health anxieties, via an examination of their bodies and health through the reflexive diaries. The real strength of these methodologies, and of this thesis, is the temporal, reflexive and influential nature of the methodologies, participants' responses and thus the research findings. As Sophie recognised, when she reflected back upon her diary, her earlier reflections had informed her subsequent sharing practices and entries. Sophie felt alarmed at her reflections and discovery of self – a lack of recognition of the person she was from the perspective of the person she had become, and thus in one of her final diary entries remarked: "I looked back and just thought, 'who is this person'?!!!" (Sophie, Diary Entry, 31, F)

CHAPTER FOUR

HEALTH IDENTITY AND METHODOLOGICAL INFLUENCES

This chapter examines what 'health' meant to the research participants in the context of a contemporary neoliberal society. Ideologically, we no longer simply view good health as an opposite to ill health. Through neoliberal political and socio-economic discourses, individuals are told how to be healthy through consumption habits (Crouch, 2011; Davies 2016; Lewis, 2008; Mennel et al., 1992; Featherstone, 1991; Williams and Miller, 1998; Bourdieu, 1984; Hinchcliffe and Woodward, 2004). Conceptualisations of the digital self are now identifiable by 'signs' of consumption, and in turn a reflexive process ensues whereby "it is equated with participation" (Adams and Raisborough, 2008: 1171). These practices of consumption can be identified not only as what we put in our physical bodies (e.g. food or drink intake), but also the platforms and devices we use in the management of our 'health', as well as what we share online through self-representational tools on social media. A collapse has therefore occurred between the physical and metaphorical consumer, achieved through embedding consumption practices within a moral discourse. Social media are key platforms and social venues to represent such 'healthy' lifestyles through self and peer surveillance of 'health'-related content. By drawing on participant responses, this chapter will argue how 'health' has increasingly become representative of and entwined with constructions of the self and lifestyle practices. This will be achieved through the analysis of how the individual participants identified and understood health. Through textual and thematic analysis of empirical data from semi-structured interviews, reflexive diaries, and online content, this chapter explores how such practices of fitness and health self-representation within social media (Facebook and Instagram), enable the self-surveillance of the body, its capacities and limitations. The influences of the methodological approach of this thesis interestingly became an integral tool for the participants to understand their health decisions and practices, expanding their conceptualisations and influencing future posts, diary entries and health behaviours. Therefore, the final section of this chapter will attend to the methodological impact this research has had upon the participants' health practices. This chapter will be split into three overarching sections: 'What is Health?', 'Health identities' and the 'Methodological Impact upon Participants Health Practices'.

4.1 Part 1: What is 'Health'?

'Health' is a term used throughout this thesis to convey, understand and represent human physical and mental wellbeing, capabilities and capacities. As theoretically framed by the critical review of the literature, this thesis offers a variety of multi-faceted conceptualisations of health. The intangible definition of good 'health' can be ascribed to different states of being, which means that health has become ascribed to and is maintained by individual education and prevention, self-regulation, self-surveillance and self-tracking (Swan, 2012a). Therefore, 'health' is not used interchangeably in opposition to poor physical or mental health. Rather, 'health' is theoretically framed and interpreted by the participants to demonstrate and encompass many aspects of their

lifestyles and relationship with their bodies, behaviours and sense of personal identity. This first of the five analytical chapters ('Health Identity and Methodological Influences') will focus on interrogating these many conceptualisations of 'health', as framed through the literature reviewed and interpreted by the research participants. The first section in this chapter will examine the participants' interpretations and conceptualisations of 'health', what health meant to them and how this may have changed over time throughout their lives, and specifically during the three to nine-month research period.

4.1.1 Quantifications of 'Health'

Aside from what, where and why the participants were sharing their content, one of the first interview questions asked was: 'What does the word health mean to you?' Given that the participants were recruited based on sharing health-related content on Facebook and Instagram, interestingly most were confused by this question and struggled to identify what the significance of 'health' was for them. This highlighted the many conceptualisations, wide ambiguity and understandings of what 'health' meant to these individuals, whose lifestyles centred around attempts to maintain 'good health'. During the interviews, the participants were therefore often prompted by being asked: 'What is 'healthy?' A wide range of responses were received, ranging from quantified 'health', to physical ability and mental wellbeing. For Fet, a keen cyclist who tracked his daily work commute, 'health' was quantifiable through metrics and being 'healthy' was determined by his body weight:

> "Mine is a number, and my number is 65kg, and if I'm above 65kg I consider myself as 'unhealthy'. For me I could be 66kg or I could be 80kg. There's no difference: as long as I go above that benchmark. I know I'm eating well, yeah. I have the odd kebab or Chinese on the weekend but in general during the week I eat well. I would consider myself a healthy eater. When it comes to health overall (…) if I'm above 65kg, which I've set myself, I don't know why or how, I think mainly because that's my weight roughly, for the past 10 years because I haven't really changed in terms of my weight, so if I go above that mark by 1kg or 10kg I'm unhealthy" (Fet, First Interview, 30, M).

Fet 'set' and determined his 'health' by numerical weight. His reasoning was interestingly unclear to him. However, the use of numbers to determine his 'healthiness' was considered in regard to the consistency of being approximately a certain weight over a 10-year period. Interestingly, his rationale for determining whether he was 'unhealthy' or not was related to being above this 'set' weight of 65kg, regardless of the relative increase in metrics. For example, being 75kg or 100kg was not a determinant of degrees of 'un-healthiness'. Quite simply, for Fet, weighing over 65kg had a causal relationship with being 'unhealthy'. Therefore, the physical deterioration of health was understood through numerical weight gain, regardless of other mental or physical factors such as illness, disease, lack of nutrition, or exercise (in his case, cycling). Fet's perspective resonated with Purpura et al.'s (2011: 6) argument concerning and recognition of the "idea that sensors accurately

measure attributes that directly translate to health; that health can be measured [works] in a purely reductive way". Another interesting aspect of this response is the metricised interpretation of being a 'healthy eater', which Fet related to eating 'well' five days per week, with 'unhealthy' foods (such as takeaways) consumed only on the weekend. He expanded:

> "I'm not a gym freak, never actually set foot in a gym and I'm not obsessive about keeping healthy, mainly because I'm lucky my metabolism is pretty quick and I've always been roughly the same weight, but saying that I have a weight goal, to not go over, because in my mind if I go over that I would feel unhealthy that goal is 65kg" (Fet, Final Interview, 30, M).

For Fet, being healthy was being his goal weight. Quantifying his health in this way arguably meant that Fet did not have to take into consideration the self-regulation of many other lifestyle factors, which could impact on 'healthiness' (such as exercise). By relying on this simplified quantification system, Fet understood his health through numbers in line with the discourse advocated by the self-quantification community and its founders, Gary Wolf and Kevin Kelly. This approach advocates 'self-knowledge by numbers' (Wolf and Kelly, 2010). These reductive approaches to understanding and managing health reflect how the participants' interpretations of what determines 'good health' or 'ill health' is strongly encoded by their own technological, medical and cultural assumptions (Roach, 2017), which creates categories of importance. A number of questions can therefore be asked: What data do we collect and why? How does this reflect cultural, technological and medical assumptions and discourses concerning what is 'healthy' or 'unhealthy'? These will remain open questions, as I navigate the following sections.

4.1.2 Discourses of 'Healthism'

Many of the other participants did not 'quantify' health in this way. Most participants considered 'health' to be an overly abstract term and concept to enumerate and bound. As Sophie explained in her final interview:

> "It's hard to quantify what healthy means because there's so many contexts it can apply to" (Sophie, Final Interview, 31, F).

Here, Sophie demonstrates many of the participants' internal struggles with the term health and what it means to them, and the many contexts in which 'health' or 'ill health' can be applied. In this way, most participants perceived 'health' in a holistic way. This can be aligned with Crawford's (1980) theory of 'healthism'; the representation of good health as a priority in which health promotion expects individuals to adopt health as a priority and to change their lifestyles accordingly. This perspective was referenced by Annie in her first interview:

> "It means everything, it's my life, (…) but it has made me realise, before I was a bit like you can just be happy, you don't have to be sad, just choose to be happy, but what I've realised

> now sometimes that's not something you can just choose to do. You've got to enjoy the journey and learn from it" (Annie, First Interview, 28, F).

Most of the participants acknowledged that being both physically and mentally 'healthy' was something that felt automatic when they were 'young' or 'younger'. Considering that the participants' ages ranged from 26 to 49 years, none of them would be considered 'old'. Yet, they all acknowledged that good health was something that needed to be achieved, worked on, optimised or improved as a transformative result of self-knowledge, personal discipline and hard work. Compared to when they were 'young(er)' and good health was automatically understood as a 'given', with age (similarly ambiguously interpreted) came an internal locus of control to influence and hold power over and manage individual health outcomes (Lorig and Holman, 2003). Through these relatively long-term health self-tracking practices, users are drawn into a continual cycle of health analysis, reflection and action. Lara for example, identified with being fit, active and healthy when 'young' but recognised with age that this was harder to maintain. She referred to this as 'letting herself go', a very derogatory yet common discourse that sees weight gain as something that comes with age *(ibid):*

> "I think, I've always been quite health conscious, I used to teach 'Jazzercise' [an aerobics class] I was always fit, maybe I've just let myself go, because in my head I was still fit because that was part of my identity. Now I don't feel like I am as fit, and it dawned on me when I couldn't do certain things [exercises], and when I wasn't 'looking' as I had done [before], then I wanted to cover up parts [of my body] on the beach or whatever. I went for a run then the other day and I was like - it's hard, it's the realisation that you're not part of that identity, that you are getting older or you need to go out and do stuff to maintain that" (Lara, First Interview, 28, F).

Health was also equated to being 'fit' and more importantly, not being 'fat' (Goodyear et al., 2017). Participants perceived health often in terms of polarising frames, such as 'success' (being 'healthy') or failure (being 'unhealthy' or having illness), which were attributed to a personal belief in their own success or failure to manage their health. With age, 'good health' was not automatic and was recognised as requiring a lot of effort, which would be perceived by participants as personal 'success'. Furthermore, in opposition, automatically assumed 'health' when 'young(er)' was perceived by the participants as something out of their control: when you are young, you are 'heathy'. If you are unwell this would be down to bad luck, demonstrating an external locus of control (Rotter and Rafferty, 1950; Lorig and Holman, 2003). This reflects the public health discourses of the 1970s and 1980s, which advocated 'rights to health', but in the context of an individual moral obligation to preserve one's own health as public duty, free from the state or institutional support (Knowles, 1997: 64). For Roy, health and fitness are about making decisions, and making him a 'better person', who is proactive and productive:

> "Right now, for me, health and fitness are decisions. The whole 'I'm moving' [physically] and this is making me a better person (…) but it's not like ok I'm doing this to lower my

> blood pressure or not die. It's something I do, and then what I do in that context that matters" (Roy, First Interview, 26, M).

For Roy, exercise was not about tackling the impact of aging on his body. Rather, similar to Lara's view, health was about decisions he made to optimise himself as a person and subject, reflecting Neff and Nafus' (2016: 57) argument that: "The promise of individuals 'taking control' may very well be disguised as empowerment". Such feelings of 'empowerment' that the participants put forward to 'control' health through self-management were bound up with internal contentions related to how to maintain balance. The balance between maintaining and improving personal health whilst not being overwhelmed by self-policing and regulating practices, particularly in regard to consumption (such as food and drink intake), became a continual and contentious process within individual conceptions and interpretations of health. This was clearly demonstrated by Sophie:

> "You know what I think healthy is? Having a healthy relationship with food, that's a good way to look at it (…) everything in balance, everything in moderation. Don't give yourself a hard time, try and eat good most of the time, if you fancy a treat have a treat (…) Not getting obsessive" (Sophie, Final Interview, 31, F).

Overwhelming self-policing practices, which affected mental health, for Sophie and others, were understood as 'obsessive behaviours'. Sophie discussed how she determined when her behaviour became compulsive:

> "Obsessive for me is when there is a constant thought about something I should be doing or shouldn't be doing, I've got quite an obsessive personality, and that's been with a lot of things in life" (Sophie, First Interview, 31, F).

These behaviours were described by participants as often the motivating factor for self-improvement and continual self-optimisation, but which frequently fed into and spilt over into many aspects of their lives and lifestyles, not just health and fitness behaviours. This identification and regulation of obsession is a result of internal self-surveillance and preoccupation with the body "being presented [within postfeminist media culture as] simultaneously as a women's source of power and as always already unruly and requiring constant monitoring" (Gill, 2007b: 152) Though Gill (2007b) refers to women here, many of the participants both male and female acknowledged and referred to 'transformations of the body' as being part of a health 'journey' to discipline the disorderly body through health and lifestyle transformations (Gill, 2007b). Whether this was because they were going through bouts of ill health or serious disease, or simply engaging and reflecting on their often-changing health practices over time, this process was always considered a personal 'discovery', described in a narrative format.

This was particularly pertinent for those training towards specific goals like marathon training or weight loss, and those dealing with illness and disease. Amy, for example was diagnosed with

cancer two months before beginning the reflexive diary. She was publicly diarising what she called her health 'journey' through Facebook status updates, and reflecting on this process during the research period:

> "In the past week, though I still very much believe I need to maintain a healthy diet whilst I have cancer, I have learnt not to compromise my mental state to do this, and still enjoy food I love when I feel like it, just mindfully. This gave new confidence in my family and friends, seeing I wasn't only choosing certain lifestyle choices out of fear, but listening to my body and giving some leeway. I felt much more settled with this approach and felt everyone was on my side and not wanting something different from me. I would never have changed my lifestyle habits because of what they were all saying - I am independent in this journey and have taken full responsibility for researching all there is to know and making my own choices - but it did help to be on the same page as my loved ones when I started to relax my regime" (Amy, Diary Entry, 27, F).

Amy recognised that her interpretation of what 'health' meant was constantly evolving in line with her own decision-making and internal contentions of what she was (not) allowed to do and eat. This demonstrates Ziebland and Wyke's (2012: 198) assertion that "the social construction of an illness is contoured as well as challenged by people with the illness". This diary entry was contextualised in her final interview, where she stated that when she was diagnosed with cancer she felt a strong drive to eat only 'healthy' nutritious foods and avoid certain 'treats', through strict self-discipline. To maintain and improve her physical health through food intake, she additionally felt that by eating well, and avoiding 'treat' foods, she could potentially mitigate any negative health effects and prevent further deterioration of her physical health, which could lead to 'making the cancer worse'. Surveying and monitoring then, were used as methods to prevent future ill health or disease from materialising. As Swan (2012a: 113) asserts: "The individual has become the central focal point in health, which is now seen as a systemic complexity of wellness and prevention, as opposed to an isolated condition or pathology". Managing susceptibility, or managing disease in Amy's case, refers to a biological marker, as well as enabling considerations of future ill health or the continuation of a disease. Therefore, enacting 'healthy' decisions in the present, brings the potentially pathological future into the current day, by taking 'action' to reduce the likelihood of ill health in the future (Rose, 2013).

For Amy, eating well contributed to her mental health. She felt she was prioritising nutrition over enjoyment of other pleasurable 'cheat' foods to enact self-responsibilising practices of self-care, which she embodied as 'healthy' and productive. Amy felt that this self-surveillance and self-regulation enabled her best attempt to manage food and nutritional intake and to 'fight' the cancer, thus giving her the best chance of recovery. Disease, and especially cancer, was often interpreted by the participants, through a discourse of a battle to be won and overcome (Highlight Cancer, Cancer Research UK, 2017). Over time though, as expressed in the diary entry above, the pressured self-policing of food helped to maintain and enable good 'health' during chemotherapy treatment, Amy

identified with a perspective of fear, which she perceived as negatively contributing to her mental health. She expanded that her 'loved ones' supported this view to relax her 'regime' of over-regulation and disciplinary practices with regards to her consumption practices, as they were causing her stress and anxiety. In turn, this was viewed as having a negative effect on her mental and physical health. In this entry, she stressed personal 'independence', taking responsibility to accrue knowledge of how she can maintain and improve her health whist undergoing chemotherapy treatment, and simultaneously resisting any urges to let her lifestyle be dictated by the disease, treatment, personal health management and self-care.

4.2 Part 2: Health Identities

Our identities are increasingly being articulated and experienced through mobile platforms in terms of data exchange. Urry and Elliot (2010: 6) argue that such mobility transcends into an "individualised order of flexible, liquid and increasingly mobile lives", which involves "complex interplays between connection and disconnection" *(ibid:* 5). This mobility paradigm is how our mobile lives are assembled, embodying the intersections between mobile worlds and mobile lives, which have come to define our identity *(ibid).* We tailor our devices to suit the needs, wants and logistics of our daily habits and communication practices, as much as our devices tailor and influence us. The following sections will examine some of the ways the participants developed their sense of health identity through using self-tracking and social media technologies.

4.2.1 Being a 'Commuter-Cyclist'

Sensors, computers, wearables and other forms of new technology are increasingly being used to create new forms of self-expression, through self-identifying self-tracking practices. Fet relocated to London from Brighton just before he began the reflexive diary and tracks his cycling commute. His identity, which he strongly relates to being a 'cyclist', was embodied from an early age. As a child, he used his bike to visit friends. As he got older, and with his different commute from home to work, Fet began to consider himself as a cycling commuter, in addition to 'being' a cyclist:

> "As a cyclist, I am not only someone who uses it as sport. I use it recreationally and I also use it as a form of transport. So, I guess I felt more as a commuter lately because I've been using it mainly for my commute, but not to say that as soon as my commute is over my bike is hanging up on the wall or parked up. No, I use it to go to the shop (…) I ride it around if I'm stressed. So that's what I meant by I'm a cyclist overall, recently I have identified as a commuter" (Fet, First Interview, 30, M).

For Fet, identifying as a cyclist meant that he considered his bike not only as an extension of himself, physically. Rather, it was an intricate part of his own body:

> "It was almost like my feet, it was attached to me". (Fet, First Interview, 30, M)

His bike also has an identity. 'Her' name is Madison and she has feelings:

> "Madison was always attached to me (…). I feel less of a committed cyclist. My bike's been quite cranky because I've not been using her" (Fet, First Interview, 30, M).

Through not cycling as regularly as before his relocation, Fet's identity shifted from being a 'committed' to a 'commuter' cyclist. On further discussion and examination of this shift, it can be understood that the regularity of cycling (for pleasure and commuting) is what contributes to feelings of 'commitment' and identifying as a 'healthy' cyclist. This lack of regularly committing to cycling, arguably contributes to Fet's perception of being 'unhealthy'. Most interestingly however, this lack of commitment also manifests itself in his relationship to his bicycle, especially his feelings of neglect towards its physical form. This is due to it previously being perceived and embodied as an extension of himself as a physical and functional tool to get around on, whilst also enjoying cycling. The bike, 'Madison' is mechanically 'cranky' from lack of use, and metaphorically embodies Fet's feelings of neglect towards his own body, which crucially, he also embodies in relation to his bike. Simultaneously, on a humorous level, Fet perceives this as being experienced emotively by the bike itself. For Fet, the bike 'Madison' becomes a personalised extension of his self. His non-use of 'her' highlights his anxieties around being 'inactive' or neglectful towards his bike as a mechanical function, as well as towards his underused 'unhealthy' body.

4.2.2 'Lay-Experts' of Health

The participants battled with the hybridity of what they understood as personal, private and self-representational online identities. It can be asked then: What does it mean to cycle for pleasure as well as practical purposes such as cycling to work? What does it mean to enjoy cycling without feeling a desire to document its benefits online, whilst at other times sharing self-tracked cycling data? What different identities are embodied when exercising as part of a commuting routine and exercising for fun, competitively or as a group activity? What does it mean to be a marathon runner as opposed to someone who runs for pleasure and to keep fit? These questions are pertinent when considering the narrative of Lou. Lou was training for the 2017 London Marathon during completion of the reflexive diary. As the event became closer and her training advanced, her identity as a 'layperson' marathon trainer shifted into being a 'marathon runner':

> "Yes, it felt like I really was a marathon runner (to be!)" (Lou, Diary Entry, 29, F)

Lou's perceptions therefore shifted from being someone who ran for pleasure and to keep fit, to someone who was running for a definite purpose. Her perception of being able to not only take part but compete in the marathon, shifted Lou's perceptions of her own identity, which transformed into a more 'professional' conceptualisation of self and health activity, which took into account the 'impressive' capabilities of her body.

Bizarrely, most of the participants identified that they had 'always' been self-surveying their health and lifestyle behaviours but considered self-tracking (which they all practiced in either qualitative or quantitative ways) as something they all initially resisted. This was due to the stigma attached to what they considered to be self-monitoring and surveying practices, particularly in relation to self-tracking. The stigma related to self-tracking was perceived as representative of 'nerdy' health identities, which were seen as self-indulgent and indicative of being an obsessive 'health' freak. For example, Fet used to time his cycling commute on his watch, and now uses the Map My Ride app on his IPhone, but was initially resistant to self-tracking devices:

> "Because I never thought that it's something that I'd do ever really" (Fet, Final Interview, 30, M).

Stigmas attached to 'being' a self-tracker were overcome when participants considered the technology a useful tool to track and enable easy monitoring of health and fitness. Ironically, issues with the self-tracking technologies (devices or applications) increasingly became the reason participants stopped using self-tracking tools. Quitting or digital detoxing will be examined in further detail in the fifth and final analytical chapter (eight).

Tim frequently struggled with questions of identity and thinking about his sense of self:

> "I'm not that aware of a sense of self. I'm not, I don't know, I really struggle, whenever I really wrote stuff and answered that question, I often rewrote it a lot of times, because I would try and answer it and then I'd look at it and be like no, I don't feel like that" (Tim, Final Interview, 34, M).

Yet, throughout his diary entries Tim frequently referred to knowing himself well; his traits, likes and dislikes. Therefore, perhaps the language used in the diary was misinterpreted, which could be considered a limitation of this research. However, though he could not identify this himself, Tim's sense of self, in a similar way to the other participants, was not individually interpreted as what one is born with. Like Giddens' (1991) theories of the self, the participants' sense of self was not fixed and bounded to a fixed essence that does not change over time. One's sense of self therefore, was not considered to be something permanent but was conceptualised as a transformative entity, continually evolving. In the case of this research, this was managed and monitored through and with these 'technologies of the self'. This was a lifestyle for participants. Even if they chose not to describe it in this way, most considered these practices and inherent self-reflexive evaluations as a 'way of life'. In this regard, the 'self' is a reflexive project, which is continually worked and reflected upon *(ibid).* The self does not exist without being continually monitored, speculated upon and at times adjusted. In line with Giddens' *(ibid)* arguments of identity being multifaceted yet whole, participants similarly saw their individual identity as complex but as one thing, which was part of a whole:

> "This question has had me thinking really hard and retyping my response several times. I'm not sure I know what my sense of self is, what I would want it to be or in fact if I need to know/have that it to live a complete, happy and fit life. I do Yoga, go the gym and try to be reasonably healthy but that isn't just who I am (…) I am me! I'll think on this more and expand later" (Tim, Diary Entry, 34, M).

Tim's own understanding and definitions of self and identity differed from the researcher's. Interestingly, Tim's engagement with his diarised reflections, drew him to research what one's sense of self and identity meant:

> "I do research it a lot, not necessarily on Instagram, but on the internet as a whole. I guess it's this sense of self that I still don't fully get. This is definitely something that I'll take away from this, it's something I want to know about and get to understand" (Tim, Final Interview, 34, M).

For Tim, research is undertaken to understand and ironically gain a sense of self. This was explored in the final interview, when Tim acknowledged that:

> "I do kind of think of myself as being yogi if you will, but then I also don't, that's just something that I do (…) I do know who I am and am happy with who I am and all of that but I just couldn't really put that into words in that way" (Tim, Final Interview, 34 M).

Tim described himself as a yogi but considered it simply just as something that he does rather than who he is. Most of the participants undertook their activities daily yet none described themselves as experts of their chosen practices. It could be asked whether this is because of the saturation of individuals who present themselves as fitness 'professionals' or 'influencers' daily on social media, and in particular Instagram. The participants regularly viewed these social media users ('influencers') as motivating figures who provided inspirational content, but sometimes felt intimidated by their achievements. Feelings of intimidation experienced usually had a de-motivating impact. Participants felt that 'professional' or 'expert' levels of achievement or knowledge were unattainable, even though the 'influencers' they followed were rarely professionals, just individuals who presented and commodified themselves as such to legitimate and brand their 'coaching' and knowledge sharing, to gain followers. This was demonstrated by Lou and Lara, who both identify as runners, but who compared themselves to 'better' or professional runners as a motivating tool:

> "This time round I managed to go further in my training runs. I was quicker in my training runs, so I think I actually felt a bit more like, even though I wouldn't classify myself as a runner compared to a lot of my friends even though they think I am because I've run quite a lot, but I'm nowhere near professional or anything like that. But I definitely felt more prepared and ready for it this time. It was probably the sort of thing I would never get to

> mentally in my head if I wasn't reflecting on it and writing it down [in the reflexive diary]. I don't think there was any moment when I was like you're totally Mo Farah, you've totally got this" (Lou, Final Interview, 29 F).

To unpack Lou's self-identification in Giddens' (1991) terms, it can be said that Lou supplies herself with a biography and a personal narrative that expresses her enjoyment of running regularly but not being a professional. Yet, through comparative dialogue and discussion with others, and the additional self-reflexivity displayed in the diarising, Lou draws on these narratives and identities, and thus embodies being a fit, active and proficient runner capable of achieving her goals. Matt further draws on this comparison and the continual competition arguably inherent in fitness communities. He explains that for him it affects his sense of identity and personal achievement, and argues that:

> "Whatever you do regardless of what you do there's always going to be someone that's fitter, faster or stronger than you so basically the only person that you are actually in competition with is yourself" (Matt, Final Interview, 41, M).

The immaterial and disembodied characters of bio-media affect how we perceive the body and the biological realm (Thacker, 2003) and perhaps never more so than when we view other sharers' content of goals reached or bodily transformations on social media. Others' perceptions of individual parameters and the representation of disembodied characters can construct attainment in a distanced way, which, as the participants observed, may never be personally met:

> "Initially I said I wanted to do a marathon and that's quite a big goal, so I think everyone was like 'ummm'. Then I thought 'I'm going to try and prove you wrong' but obviously it was funny. One of the guys I work with, he wasn't encouraging, after doing the 10km race was like yeah I think you're right, I should start with a half marathon, I don't want to go out into the full marathon" (Lara, Final Interview, 28, F).

Other people's perceptions of your fitness levels, especially for beginners, or people training for a marathon or towards a specific goal for the first time, fed into the participants' own sense of what they felt they could achieve. This sometimes manifested itself in quite a derogatory way, informed by negative feedback from their offline community when support for individual training was not received, as demonstrated in Lara's case above. Therefore, these "practices of surveillance, at the same time, entail and promote self-surveillance" (Goodyear et al., 2017: 3). As Rose (2007: 3) identifies, although "grounded in norms and claims of truth (…) self-surveillance involves certain truths about how health and healthy behaviour is privileged". These truth claims were often interpreted by the participants as having to be validated by external sources (Goodyear et al., 2017: 7). In recognition of not being of the same 'standard' as these 'experts', many of the participants spent a lot of their time researching their health and fitness interests. This research was always online, as Tim explained:

> "It's almost to gain a bigger, wider understanding of it. So obviously I go to a yoga class and I learn things and then that for me, for some people that would probably be enough and then they'd just go back next week and learn some more. For me I like to immerse myself in it and gain a bigger understanding for it, it probably enhances my sense of self I guess because without having a wide knowledge of it then I wouldn't feel that I was getting the most out of it as I could. For me that's important in lots of things that I do" (Tim, Final Interview, 34, M).

As with Tim, all of the participants expressed this desire to research, and learn more, to strive to be the best version of themselves, reinforcing a discourse and cycle of continual self-improvement. As Matt expressed, he frequently felt in a:

> "mind-set of constantly trying to learn" (Matt, First Interview, 41, M).

This involved the "'strategic adoption of lifestyle options', likely to have been pulled from consumer culture, to relate to a planned 'trajectory', geared to maintaining a meaningful biographical narrative" (Giddens, 1991: 243-244). The time spent on prioritising certain aspects of 'health' created an interesting dynamic for the participants. There was much deliberation about what time should be allocated to doing which activity (exercise versus rest, or exercise versus preparing healthy food), demonstrating challenging health contentions for these individuals in their everyday lives. As Percey (1972: 113) asserts: "In the lay culture of a scientific society, nothing is easier to fall prey to a kind of seduction which renders one's very self from itself into an all transcending 'objective' consciousness and a consumer-self with a list of needs to be satisfied". Confidence, then, is gained from commitment to goals, but also satisfying all of one's personal choices. These lists do not centre around one goal, but many, and self-achievement is only felt and embodied if all are satisfied. As Lara wrote:

> "I felt really good and wanted to keep up the good routine of running regularly, doing more yoga and eating well. My mood was really good, I felt real sense of myself, like my confidence from the commitment I was making to myself was reassuring me somehow" (Lara, Diary Entry, 28, F).

Self-tracking optimises this discourse of self-fulfilment being only achievable through self-interested material and the ideological gain of the data, which is seen to provide legitimacy for their being, and their role as 'healthy' citizens, thus self-regulating within a society of distanced state support; "These aspects of diet and exercise can be seen as embodying broader cultural concerns (...) the emphasis of the attributes of efficiency, calculability, predictability, and nonhuman (frequently technological) control" (Purpura et al., 2011: 6-7). Control and self-discipline over the body, routines, health and fitness-related practices make the user feel 'stronger' in themselves. These feelings become embodied and woven into the fabric of the self:

> "I do find the more I make time for this for myself, the stronger I feel in myself to cope with other things. I find it really head clearing and affirmative in my own decision making" (Lara, Diary Entry, 28, F).

Through the participants' responses, the research findings identified that this commitment to self-management manifested itself as a personal responsibility and control over one's health, through the positive feelings associated with such actions.

4.3 Methodological Impact upon Participants 'Health' Practices

As the previous 'Research Methodology' chapter identified, the methodological approach of this thesis - the triangulation of semi-structured interviews, reflexive diaries and screenshots of online content – enabled the generation of a wealth and depth of analysis not only for the researcher, but also for the participants. The final section of this chapter will identify and examine the process of engaging with the research methods, in particular the reflexive diary, from the participants' perspectives. I will examine how it encouraged the participants to engage with and generate their own insights into their health and identities, behaviours, self-surveillance and sharing practices. Over the extended engagement of the three to nine-month research period, the participants' conceptualisations and practices shifted and changed in line with these self-reflections, which was enabled through participating in the reflexive diary and semi-structured interviews.

The methodological influence of undertaking the reflexive diary encouraged additional insights into self-surveying modes through self-tracking practices. Lou used the diary as a monitoring tool, in addition to her self-tracking app and marathon training plans:

> "It was nice to have that time and space to focus in on what I was doing and have that log, rather than it be just a log of training runs on an app. It gave me that space to think about what that meant in terms of achievements and the confidence behind it" (Lou, Final Interview, 29, F).

Most of the participants identified the positive and negative impacts of health diarising, and how these motivated health and fitness behaviours:

> "I actually found it was motivating to me because I knew I had to write stuff. I know on some of the days I varied it up so there were days when I hadn't done anything and I wrote about that, I could get to the point where I was like 'I haven't done my diary yet' and 'I haven't been out running', I need to go out running. It was also like a motivation thing for me and I realised when I stopped doing the diary there wasn't as much as a pressure to go

> out and do stuff. It was quite helpful in a way and I found it really interesting to reflect on my motivation for what I was posting and why" (Lara, Final Interview, 28, F).

Mostly, the participants identified with the positive impacts of health diarising: how it impacts health and fitness behaviours by motivating 'healthy' behaviours. Fet, in a similar way to the other participants, identified the process of completing the diary with helping him to gain an additional understanding of his data:

> "I wanted to do it, specifically for my cycling, moving to a new location and the commute is new so I wanted to see how well I'd do and why not I guess use it as a self-tracking and sharing it whereas before I'd probably just look at it and do nothing with the data" (Fet, Final Interview, 30, M).

Rather than just simply self-tracking and acquiring the data, the participants perceived diarising as a tool that enabled them to 'learn more' about themselves. Simultaneously, it helped them to understand how they felt about their health, bodies and lifestyles. As demonstrated by Lara:

> "I've found writing it down made me reflect more and question things a bit more, motivations of what I was doing. (…) It sparked something in my head from writing it down, as I was reflecting" (Lara, Final Interview, 28, F).

Many of the participants found that completing the diary had productive and therapeutic benefits, as it made them become more reflective (Kenten, 2010) and aware of their health practices and motivations for sharing. For all the participants, this was perceived to be productive as a means of achieving individual health monitoring in the face of changing personal circumstances. In this regard, some of these changes included moving to a new house, relocating to another city/country, travelling, changing jobs or suffering from mental health issues. Participants identified these shifts as 'health journeys'; an engagement enabled through the process of completing the reflexive diaries, which aided an understanding of decisions around health practices and the use of technology during busy and transformative periods in their personal lives. Annie, for instance, described her own personal changes and perspectives on her life, health and identity as a paradigm shift:

> "At the end of 2015 when I had another breakdown after trying to be strong after my seizure and having to accept that I had to have brain surgery, I was looking at it in a terrible sad way, fearing for my life and thinking what's the point of going on, (…) my paradigm shift is that I've just switched everything around and pushed a positive out of it, I looked at it through different eyes" (Annie, Final Interview, 28, F).

Going through a serious health trauma, injury or surgery for example, motivated Annie to want to help, support and inspire others, to promote a discourse of overcoming challenging experiences in life, and to grow and learn from them:

> "I've just felt like I could feel drowned with this or I could do something for people. I just felt this inner thing that was telling me that I had to use this, it was bigger than me, it wasn't just me going through a little thing. This was my chance to help and change people's lives. I don't know what made me feel like I needed to do that, I still feel like I want to do that, but I just know that I've got to be in a good place to get back to that sort of thing. It's just something I've always felt like I need to do, help lift other people up, change their lives" (Annie, Final Interview, 28, F).

The methodological impact is key here, as the participants felt that diarising was a therapeutic process with supportive benefits. It also provided what Lou termed a 'mental confidence', which supported their practices:

> "I think writing it down and reflecting on it helped with the mental confidence behind it because actually if you look back over this time you have got so much better, you have got quicker, you are more invested in this" (Lou, Final Interview 29, F).

The confidence gained from self-reflection whilst diarising motivated future healthy decisions and contributed to feelings of pride gained from the commitment to writing diary entries as well as the commitment to goals. Participants recognised this desire to be a 'good' monitoring subject, capturing and sharing health and lifestyle on social media. This could be perceived as participants' loyalty to being continually in line with self-analysis and self-reflexive states. As Wajcman (2014) recognises, identifying as a busy, productive, harried, social, and career driven individual creates a form of status amongst middle class professionals in contemporary digital capitalism, and neoliberal societies. This also may explain the participants' desires to engage with labour-intense processes of self-tracking and monitoring online, and even diarising, which participants chose to partake in outside of their working hours. Sophie even began keeping a diary after the three-month research period had ended:

> "After I finished doing your diary, I actually started to keep my own diary (…) At one point I was writing every day nearly, actually it encouraged me to do that because it was helping me with some of my anxiety and just getting all my thoughts out. I found it quite therapeutic" (Sophie, Final Interview, 31, F).

Sophie and the other participants recognised the therapeutic impact of writing in the reflexive diary, as it provided a pressure release of the physically embodied burden of constant analysis of your own health and fitness:

> "I feel like it's understanding all of the thoughts inside of your head and then I guess when you can make sense of the things that are going on in your head it maybe helps you try and

> deal with certain issues that you are having. It's just like a weight off your chest (…) I think I am quite a reflective person anyway" (Sophie, Final Interview, 31, F).

Sophie and Lara both recognised this pressure as a physical load they were carrying, which was released when writing and reflecting on their health and sharing self-tracking practices. All of the participants acknowledged that they were reflective people, and therefore, with the aid of the diary they were able to identify these feelings:

> "Writing it down and reflecting on it more made me realise actually, made me dig deeper into my thoughts and actually that whole process made me realise, especially when I reread over the entries after I had submitted them, I kind of felt like who is this person when I was reading over them, so it definitely helped me more engage" (Sophie, Final Interview, 31, F).

Sophie here recognises her identity and discusses it in an external way. She identifies and reflects upon herself, her behaviours and her external sharing. Sophie's concerns centre around how her curated self-representation is received by others on social media, but this anxiety is heightened through writing in the diary and then reading back through her entries. Whilst these methodologies enabled supportive and enlightening 'self-discoveries', like the self-tracking technologies and comparative and competitive practices enabled on social media, it also triggered the 'worried well' (Husain and Spence, 2015: 2). This took the form of a profound recognition of their health anxieties through the examination of their bodies and health, in the reflexive diaries. Indeed, when Sophie reflected back upon her diary, she recognised how much earlier reflections had informed subsequent sharing practices and entries. This increases her judgement of both herself, and those viewing her posts on social media. As noted in the following quote, obtained from Sophie's final interview when she reflects back upon her sharing online and simultaneous diary entries:

> "I felt like, if I didn't know that person, I would think 'oh my god, she's just totally obsessed with how she looks'. I would probably think 'does she love herself'. I feel like maybe that this person is a bit sad really, that that's taken over, I felt like I sounded very self-indulgent, I don't know. It was a bit uncomfortable reading for me at some points" (Sophie, Final Interview, 31, F).

Here, Sophie expands upon her anxieties of how she was being perceived by not only her social media community, but by the researcher as well. Consciousness of the researcher's gaze was mentioned as a concerning factor (Karl, 2009), but apart from Sophie this centred around participants worrying that they did not have enough to say. As the participants completed more entries, this anxiety eased. Demonstrating the temporal utility of repetitive questions (and prompts) over the three-month period, more entries enabled a greater depth of reflection. Whilst undertaking the diary provided the participants with a depth of engagement with their various health and fitness practices, it was also identified as an additional pressure to complete. Participants were motivated to perform certain 'healthy' fitness-related behaviours because they knew they had agreed to complete a diary, but also because they felt it provided them with a depth

of engagement, reflection and added understanding of their practices and sharing online. As Lara identified:

> "I thought if I could write underneath what I did the day before exercise wise it would be a motivation to be right you've got to write in your own diary tomorrow what you've done" (Lara, Final Interview, 28, F).

In contrast, Tim initially did not feel the diary influenced what he posted, but it did help him understand why he shared certain content on social media:

> "Very interesting (…) I just posted stuff and didn't really think about it and obviously going through the diary and your questions it made me think about stuff and it was like "oh yeah" maybe there are these other reasons that make you do things, it was very interesting to me and subconsciously [it] had an effect which I hadn't really thought about or noticed before until we started doing this (….) I don't think it's changed how I post or what I post but I definitely think about it a little bit more" (Tim, Final Interview, 34, M).

Although some of the participants were doing this prior to the research period, this pressure to perform certain practices for the purpose of the diary was perceived by some as a negative pressure as well as an encouraging motivational factor. Roy acknowledged it as productive yet time-consuming:

> "It was something I needed to make time for. So, in general I found reflecting sometimes a bit difficult" (Roy, Final Interview, 26, M).

However, Roy also felt that undertaking the reflexive diary assisted him in other aspects of his life, which went beyond merely reflecting on his health and social media sharing:

> "I think it's just writing the diary, like it's definitely a skill set you develop. Right now, I'm doing a traineeship and there's a lot of who am I, what am I going to do. You have to do a lot of reflection, so in terms of that I think it might have been useful" (Roy, Final interview, 26, M).

Completing the diary was a productive process for Roy, for it provided a practice for completing a similar task as that involved in his professional traineeship. Completing the reflexive diaries made the participants realise their motivations for posting, which they sometimes felt uncomfortable admitting to. Like Sophie, Roy explicitly stated:

> "There was at some point, I was writing something down and it was like, you really just posted this to show off, and I was like ok, so if I hadn't reflected on that I don't think I

would have noticed. I was like thinking I wanted to share this with my friends and I was thinking that's rubbish" (Roy, Final Interview, 26, M).

Through using the reflexive diaries as a personal confessional space (Kenten, 2010), as well as for the purpose of research commitments, the participants examined in detail their sharing practices and health-related behaviours in a way in which they unearthed new 'findings' and personal revelations for themselves, and for the researcher.

4.4 Conclusion

This first analytical chapter, 'Health Identity and Methodological Influences', drew on an analysis of the empirical data, to examine what 'health' meant to the research participants, how this informed the ways in which they perceived and constructed 'health identities' on social media, and how the research methodologies enabled them to further engage with and reflect upon health management, perceptions of their bodies' capacities and their sharing practices. For the participants', 'health' was conceptualised and interpreted in many different ways. Some 'quantified' health numerically in terms of 'healthy' foods consumed (counting vegetable intake), through weight management or being 'over-weight'. However, subjectively that was interpreted as 'unhealthy'. Most of the participants' responses reflected discourses of 'healthism' (Crawford, 1980), whereby achieving 'good' health became the priority over many other aspects of life(style). As framed in the critical review of the literature, health was recognised as being related to personal lifestyle choice, regardless of social or economic inequalities, reflecting neoliberal rationalities. These key themes and conceptualisations of health and its management will be examined in greater detail in the following analytical chapters, 'Self-Surveillance and Self-Tracking' (Chapter Five) and 'Self-Regulation and The Moralism of Health' (Chapter Six).

The second part of this chapter examined the participants' perceptions of their health identities. All the participants demonstrated their identification with being 'lay-experts' in their chosen health and fitness-related discipline, be it running, yoga, cycling, hand-balancing or weightlifting, but recognised that they were not 'professionals' or 'experts'. Those participants who did represent such 'expertise' in a 'health identity', considered this as something to be worked towards, which they hoped one day to achieve. Their responses thus resonated with Urry and Elliot's (2010: 7) arguments that: "the most consequential feature of accelerated mobilities for people's lives is the recasting of identity in terms of flexibility, adaptability and instant transformation". Therefore, the last section demonstrated the temporal utility of repetitive questions over the three-month period, while more entries enabled an increasing depth of reflection (Kenten, 2010), in conjunction with the contextualising nature of the semi-structured interviews. This first analytical chapter, has therefore provided an analytical contextualisation and framing of what health meant to these participants and how the methodological approach of this thesis additionally contributed to their understandings. The following four analytical chapters will examine in greater depth and detail the key themes outlined in this introductory analytical chapter.

CHAPTER FIVE

SELF-SURVEILLANCE AND SELF-TRACKING

> Identity is our mystery. We have no idea who we are – what humans are, and what humans are good for. [...] Self-tracking and the Quantified Self movement are contemporary probes into this mystery, part of our feeble attempt to figure out who we are – as individuals and a collective
>
> (Kelly, 2011: No Page).

This chapter will examine how neoliberal self-managing discourses are advocated and enabled, through Foucault's (1988: 18) theorising of 'technologies of the self', which permit "individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality". Consumer health movements have developed alongside the discursive prioritising and management of individual healthcare; this has shifted the dominant public health discourse of medical hegemony, which refers to the medical profession's control over health knowledge, health practices and healthcare, towards a discourse of "'medicalisation', which is the term used to describe the apparent encroachment of medicine upon a growing number of spheres of everyday life" (Lupton, 1997: 95). Similarly, practices of 'medicalisation' enabled through the diagnostic speculation of gathering (mis)information online, and the adoption of consumer devices and applications, enable users to gaze inward. These practices are attempts to understand what goes on inside our bodies and to monitor individual capacities through capturing self-tracking information and data, which changes and moulds health-related behaviours and activities. As identified in the introductory chapter and the critical review of the literature, this thesis, conceptualises health-optimisation as a neoliberal rationality discursively embedded within consumer and state health movements promoting continual self-improvement of health as the core ambition of the human being and human body. This chapter will attend to the dominant themes associated with self-surveillance and self-tracking, covering discourses of self-betterment and self-optimisation, pride in self-surveillance and self-discipline, input versus output discourses, health gamification, technological issues related to self-tracking, self-surveillance and body image, and lastly how health and lifestyle affect health behaviours.

Self-surveillance can be understood as a surveying practice of the self and in relation to this thesis, of one's own body, health, fitness and lifestyle choices. Self-surveillance therefore can be understood as a reflexive practice of the self, as we examined through Giddens' (1991) theorising of post-modern practices of reflexivity in understanding self-identity in the last chapter. Self-surveillance then, cannot be removed from the participants' perceptions and constructions of self-identity; it is an interrelated, interdependent and co-evolving process. The more the participants' felt they learned from being reflexive in relation to their health and fitness practices, the more self-surveying they became. Reflexivity therefore, differs from self-surveillance, and, in accordance with

Giddens' (1991) theorising, it impacts directly upon personal behaviours. The participants' reflexive practices were aided by the methodologies, particularly the process of reflexive diarising on individual behaviours and the interviews to contextualise these practices within a broader socio-economic, cultural and political perspective. Self-surveillance therefore, differs from reflexivity in that it does not always impact upon behaviour, but rather situates itself as a purposeful observation and monitoring of the self.

5.1 Themes of Self-Betterment and Self-Optimisation

Self-trackers do not always outline a specific goal but are curious about the information implicated in the numbers themselves (Wolf, 2010). Therefore, as Langwieser and Kirig (2010: 105) argue: "the rules of our knowledge-based meritocracy invite to this self-optimisation: Who wants to be healthy, happy and successful, needs to become a self-designer". This has arguably contributed to an ideological shift within society, from viewing the individual as a 'passive' consumer, to viewing them as an 'active' consumer of 'health' (Tritter, 2009). As Lara asserted:

> "I've always just wanted to be the best version I can be so I'm always looking at what I can do, it's always been kind of drummed in, I don't know where it's come from but there's always, what can I do better, or what could I have done differently" (Lara, Final Interview, 28, F).

Lara usefully articulates the overarching theme of this chapter, and arguably the entire thesis, in relation to being 'the best version of oneself' or to 'continually improve' in regard to health and fitness. Yet, the participants frequently recognised that they did not know why they felt this way. Preventing ill health, disease or death was surprisingly never identified or discussed as a reason for managing and improving health. van Dijck (2013a: 202) identifies the function of these technologies as translating "relationships between people, ideas, and things into algorithms in order to engineer and steer performance". The discourses that surround health self-care, and individualised and privatised health practices, advocated by the state and lifestyle health and wellness apps, assume that people have the power to choose healthy or unhealthy lifestyles. This is reflected in various discourses of self-betterment and continual self-improvement, which were dominant throughout the research findings:

> "If you go to a gym everybody is there for self-improvement so that's a better place to train" (Roy, Final Interview, 26, M).

The participants identified self-improvement as an inherent motivator for individuals to exercise or prioritise health and fitness-related activities and consumption. This was not always to reach specific goals:

> "I believe that my current health is good; I am in good shape so therefore calorie counting and losing weight is not my priority. I am more focused on speed and being in a better shape" (Fet, Diary Entry, 30, M).

At times, the participants were ambiguous and non-definitive about what self-improvement meant for them. Rather, they simply articulated that the goal was 'self-betterment'. Based on the belief that the more we understand ourselves through 'technologies of the self', the more we can improve ourselves, this discourse translates ideas of identification of the self into the prevention or cure of health issues, which can provide an 'economy of hope' (Novas, 2006: 289). These political and promissory economies of hope (Rose, 2007; Novas, 2006) present the logics of optimisation and improvement as an attainable goal and form of control through personal diagnosis, self-tracking and the 'hopeful' prevention of pathologies. Arguably, this could be understood as manifesting itself in the proliferation of the 'worried well' (Husain and Spence, 2015: 2), whereby the continual monitoring and capturing of data about the body through self-tracking devices and associated practices, stokes unneeded anxiety in those who are 'healthy' (*ibid*). In this regard, the 'worried well' (*ibid*) self-triggers such health anxieties through an over-examination of the body and health via these technologies. Thus, what manifests itself is a drive to continually 'optimise' and 'improve' health to feel productive, proactive and therefore 'healthy', thus enacting care of the self and responsible citizenship practices (Rose, 1999):

> "I like improvement and seeing things getting better, not necessarily getting to the best in that thing but to get to see the progression in myself. Like, that's where I started and either that's what I can do or that's what I couldn't do and then to work for it, put in hard work and the rewards of it are purely in my own mind and body. It's not for any other kind of greater gain, not to look better or for anyone's opinions of me to be any different. It's just that I feel really good that I've started somewhere. I worked hard, I looked into stuff and I improved. That's the main gain for me" (Tim, Final Interview, 35, M).

Self-identifying is therefore achieved through self-transformation, and life-strategising technologies of the self to compete within a community, which is further encouraged through self-tracking applications and practices (Urry and Elliot, 2010). Tim and many of the participants used their devices and social media as a tool not simply to listen to, read or watch, but as a platform to speak to others (Walker, 2014). The participants were the narrators, and the technologies the narratees; the audience for their words or their data (Walker, 2014):

> "Also, to show that even feeling pretty rough from the night before that exercise was possible and that it made me feel good. I also use Instagram and Facebook to look back and see where I was physically and mentally at certain times so this will show me in the future how I've improved since then and how I was feeling at that time" (Tim, Diary Entry, 34, M).

Being on a self-betterment 'journey' to achieve better health and individual skill development was a dominant discourse in all the participants' diary entries and final interviews, in which the platform enabled the space to look back and forward:

> "I still want to keep pushing myself as best I can with regards to the fitness thing. I've still got goals I want to achieve before it's physically impossible for me to achieve them. It's always going to be a part of my life I think" (Matt, Final Interview, 41, M).

These active practices of self-care situated these individuals as 'active' consumers and participators of 'health', with choice being "the mechanism that is being used to try to promote individual consumerism in health systems" (Tritter, 2009: 285). 'Choice' and 'opportunity' were referred to as tools for motivating new exercise regimes or health-related lifestyle changes:

> "I'm feeling quite determined at the moment and doing something is better than nothing, because that will build over time. I've just completed a mini course which included growth mind-set so I'm feeling quote positive about things, focusing on how to improve" (Lara, Diary Entry, 28, F).

The participants frequently reflected that an aspect of self-improvement was trying new exercises or fitness regimes, to feel 'healthy':

> "I just felt like fancied trying something different. I've been doing the boot camp thing for a while. I wanted to work on my Olympic lifting because I got to a point where I couldn't get any further and they specialise in that and we have a CrossFit gym. I've learnt quite a bit already" (Matt, Final Interview, 41, M).

Reaching 'peaks' of expertise in one practice motivated individuals to differ their exercises, and thus enabled further development and self-bettering:

> "I'll always find something else. I'll get something in my head that I want to do, I'll do that and then I'll move on to the next thing. I'm always striving to go on to the next step. Running I'll set a time, I'll get that PB and I'll want to go faster, it's the same with everything I do (…) it's just a constant learning cycle with it, you're never not learning I suppose" (Matt, Final Interview, 41, M).

Learning, optimising and improving became a continual cycle of enactment and desire (Viseu and Suchman, 2010), regardless of where it would take the participants, irrespective of specific end goals. They subsequently considered it to be a responsible process. In sum, within the discourse of self-surveillance and self-managing health behaviours exists a core pressure to be 'active' and to perform 'healthy' behaviours, to 'optimise' health. This in turn leads to a sense of personal success, pride and elation.

5.2 Pride in Self-Surveillance and Self-Discipline

Increased health awareness is part of the shift from a public, state, and medical responsibility frame, to a private responsibility frame, within healthcare (Lawrence, 2004), whereby individuals are encouraged to manage their own health, through increased individual self-knowledge (Lupton,

2012b). This shift in health responsibility ensures that we now look towards (new) media, increasingly the Internet and digital health technologies, to obtain (mis) information about health (King and Watson, 2005), symptomatic analysis, nutritional and lifestyle advice, illness prevention, and even information on healthcare policy (Seale, 2003). Reinforcing the dominant perspective of the existing self-tracking literature, all the participants acknowledged a sense of satisfaction and pride in self-surveillance, as a means of effectively self-managing their own healthcare (Green and Hubbard, 2012). As demonstrated by Fet:

> "I felt like my good result gave me more energy, as I felt over the moon. I'd accomplished something personally. I was certainly full of energy today at work" (Fet, Diary Entry, 30, M).

Similarly, individualised control was seen as a positive manifestation of self-management, related to the perceived 'ease' of using the application. A good 'time' or 'result' obtained on a self- tracking device - in this case 'Map My Ride' - contributed to feelings of personal 'energy' that genuinely motivated Fet and manifested as a physical energy. At earlier stages of the research, the participants demonstrated this discourse of self-tracking, which advocates that the increased self-surveillance and monitoring of personal bodily functions will improve individual health. This reflects self-tracking and quantification discourses, which assert that "if you cannot measure it, you cannot improve it" (Kelly, 2011: No Page). This techno-utopian perspective was initially echoed by the participants:

> "Well over my daily step goal today, so relatively happy" (Matt, Diary Entry, 41, M).

The participants' perceived happiness became linked with reaching or exceeding self-tracking goals, which became understood as a competition with oneself, considered as a positive motivation for improving fitness:

> "I feel motivated to try and beat the time and average speed of my previous journey, a competition with myself" (Fet, Diary Entry, 30, M).

If the competition with oneself was 'lost' or not achieved, other external factors like the weather for example could appease 'bad' tracked results.

> "In terms of time I wasn't that happy with the result, but I felt good because it was a really nice morning for a cycle ride" (Fet, Diary Entry, 30, M).

Furthermore, self-tracking proved to be helpful and supportive for being accountable to oneself. As Fet asserted:

> "At first, I was like really enthusiastic about it, actually the whole point of making myself accountable for trying to improve my time and speed when it comes to cycling because I know that's what I used to do without a device. I used to put a stopwatch on my watch and timed it as soon as I started peddling in and put the time off again as soon I arrived at work" (Fet, Final Interview, 30, M).

In Fet's case, it was initially easier to self-track than time his cycling commute on a watch:

> "There's no end goal, I'm not training for a marathon, I'm not training for Brighton to London bike ride, it was just something to help me, let me know that I'm still getting better at cycling every day" (Fet, Final Interview, 30, M).

The motivation to self-track was not always to reach any set goal, but rather just to know that one was continually improving in whatever way that was subjectively interpreted. This could be interpreted in Kevin Kelly's (co-founder of the Quantified Self) techno-utopian terms, which argue that "quantifying yourself is an act of self-assertion. All this attention is not a narcissist adoration of the self, but a self-definition in an age of great uncertainty about who we are" (Kelly, 2011: No Page). For a time, beating personal goals through self-tracking practices made the users feel productive or active, and contributed to their sense of identity as improving 'healthy' beings. Individualised "consumption (practices) have become the primary site for self-identification (…) in which taste and appearance are seen to be deployed as the basis of evaluative judgments of a person's moral worth and their social position" (Adams and Raisborough, 2008: 1173). As exemplified by a diary entry from Lara:

> "I felt really good and wanted to keep up the good routine of running regularly, doing more yoga and eating well. My mood was really good, I felt real sense of myself, like my confidence from the commitment I was making to myself was reassuring me somehow" (Lara, Diary Entry, 28, F).

Confidence is gained from a commitment to goals, which Adams and Raisborough (2008) argue is achieved through two sociological considerations: that the self is now being predisposed to necessarily and relentlessly engage in a (self-) reflexive practice (Giddens, 1991), and that consumption practices have now emerged as the 'privileged site' for such identity work (Adams and Rainsborough, 2008: 1166). This perspective was reflected in Lara's assertion that:

> "I do find the more I make time for myself, the stronger I feel in myself to cope with other things. I find it really head clearing and affirmative in my own decision making" (Lara, Diary Entry, 28, F).

Control and self-discipline over the body, routines, health and fitness-related practices make the user feel 'stronger' in themselves, as well as empowered (Banner, 2012). These feelings become embodied and woven into the fabric of the self. As Lou observed

> "I was thinking, this is something I have to stick with now, when I am stressed, don't just go to the pub and moan about it with a bottle of wine. Say no and put on your running shoes and run home. You're never going to regret that" (Lou, Final Interview, 29, F).

This commitment to self-governance was often interpreted by the participants as an everyday habit:

> "Personally, I want to keep a track of everything I'm doing. Running is a big part of what I do so it's become almost habitual" (Lou, Diary Entry, 29, F).

'Habit' was frequently identified as a motivation to maintain, improve and optimise 'health' for those that had been integrating related practices into their routine for many years. This evidence reinforces existing literature around bio-politics (Ajana, 2013; Foucault, 1979; Rose, 2007), which posits it as a regulatory ideology in which individuals are encouraged and incited to become new active consumers of healthcare, taking personal responsibility and educating themselves as a means of maintaining individual self-care. This perspective was demonstrated by the participants' 'competition' with themselves:

> "I felt a sense of competitiveness with myself as there are certain yoga poses I want to achieve, and I can feel from practicing more regularly they're more within reach now" (Lara, Diary Entry, 28, F).

These systems of measurement are identifiable through the use of self-tracking devices. However, they also exist but in a less visible form in the measurement of personal development through governance and the use of these 'technologies of the self', which enable participants to perceive their self-improvement and development. The concern is not always to 'share' this data, practice or development, but rather pride is felt in the perceived management of the self, achieved through performed and embodied self-governance to 'achieve', regardless of results. The 'sense' of a feeling one is continually improving becomes the individual system of measurement, and regulation of the body. For example, Tim pushed himself to do yoga practice when he was very unwell:

> "You would probably say this was typical of me.... Practically dying with flu and a chest infection but still hiking off through snow covered woods, to a lake, to do yoga... Sense of self ticked :)" (Tim, Diary Entry, 34, M).

Tim expanded on this perspective in his final interview, when he asserted that even though he was extremely unwell he had to do his yoga practice, quite simply because he 'always did it'. To maintain continual improvement Tim's internal system of measurement was a daily yoga practice, regulated

and maintained regardless of ill health and infection. In discussions around the question of whether participants would not exercise if they were unwell or too tired, most acknowledged that they would still continue with their usual regimes:

> "That doesn't happen, literally never ever. I'll be like screw you we're going training anyway (…) It's just habit, like my brain will go I'm tired, It's a force of habit. It doesn't cost any energy to get up and train anyway. It's what you do. It's like going to work" (Roy, Final Interview, 26, M).

For some participants, training or exercising was considered a part of their daily routine, like going to work. Others considered it more of an internal struggle requiring a 'bank of motivation' to undertake individual exercise routines, but were pleased once they had done it:

> "You're fighting inside your own head, to draw in on your own bank of motivation and support and at some point, especially with long distance [friendships] that gets really challenging, I guess" (Lara, Final Interview, 28, M).

Lara's 'fight' to motivate herself felt particularly prevalent as most of her support network (family and friends) live in the UK, whereas she is based in Chamonix, France. Lara felt pride in being active, but felt she needed her own 'bank' of motivation and support from those around her to ensure she stuck to a regular exercise routine. In contrast, for Roy and Lou, they felt that having a training programme helped to motivate their self-discipline:

> "It's quite essential to put the programme in front and stick to it for a certain period of time, then have the set moment where you evaluate and go: did this work; yes or no (…) For that reason, you have to stick to a programme consistently for a while before you see results. Two weeks abs don't exist. You'll barely see any noticeable progress in two weeks" (Roy, Final Interview, 26, M).

For Roy, and many of the participants, there is a habitual element to performing exercise. Training programmes can be conceptualised as a disciplinary regime; a habitual process and productive activity of the 'self':

> "I don't feel like I decided to work out today. That's what the programme says, so I do it. I made the decision to follow the programme a long time ago. I think that a more mechanical, habitual type of work is important, if not the most important part of how I manage my health, it's part of who I am. I feel going to the gym as usual reinforces that" (Roy, Final Interview, 26, M).

As Roy details here, he does not feel he 'decides' to work out. He just does it, because the 'programme says so'. The participants fitness regimes and programmes are in command, these

technologies and techniques of the self (Foucault, 1988) dictate behaviours which push and guide individuals' practices. To speak in techno-utopian terms, this can provide the participant with a sense of a 'health' identity and personal meaning, which actively contributes to individual narratives (Giddens, 1991). The individual responds with subjectivity arguably removed from the process of meaning-making, as they engage in automated behaviours. The individual and the body operate in a mechanical fashion. One could consider this a voluntary willingness to follow set goals through an exercise, diet or general lifestyle regime with rules and boundaries. As Roy asserts, it reinforces one's sense of self through self-discipline and self-regulation. Further discussions in the final interview resonated with this idea, as Roy argued that this sense of self-governance empowered him, in a similar way to the other participants, who were following similar 'programmes'. On the other hand, this could be considered an extension of the neoliberal 'government of the soul' (Rose, 1999: 11), which is in line with self-improvement discourses that advocate self-betterment as the dominant priority during 'rest' periods (for example, holidays) or when unwell. In this case, exercise may in fact not be 'good' for the participants. In contrast, training routines and exercising are also perceived as a desired structure and self-disciplinary practice, viewed as a way to escape demands related to work and social life, when living in a busy city:

> "I think I definitely train better when I have an end goal, like something that I've paid for, signed up for, committed to and told people about rather than yeah I want to get fitter or those sorts of vaguer goals. It just gave me quite a lot of structure actually, (…) committing to something with such a stringent training plan that you have to follow actually helped me rejig and reassess my life" (Lou, Final Interview, 29, F).

This viewpoint arguably emerges, in response to broader socio-cultural and political neoliberal discourses related to the betterment, improvement and optimisation of the self through technology (Moore and Robinson, 2016; Moore, 2017). The priority here then, is the focus on being productive and improving oneself. For the participants, this became the individual identity, identifier and embodiment of feeling like an ethical citizen, consumer or individual, regardless of any actual developments, or whether this was in fact to the detriment of their physical or mental health. Arguably, in this way, these training regimes or self-betterment goals were imposed and adhered to as a form of dealing with individual uncertainties about their own lives (Giddens, 1991), futures and health. Control, therefore, for these participants was enabled by aspirations towards and ideals of how best to manage and enable health management and self-betterment. To step outside of and resist these frames of self-governance would be to resist panoptic surveillance (Foucault, 1975), presented through the consumer devices and broader governing discourses of being a morally 'good' proactive individual and citizen (this is further examined in the following analytical chapter). This chimes with Foucault's (1979, 1997b: 67) concept of 'governmentality': the regulatory activity that shapes the self as well as public beliefs and behaviours surrounding health maintenance and self-management. We can see how the parameters and goals set by the individuals within these technologies illustrates Moore and Robinson's (2016: 2776) conceptualisation of neoliberalism as

"an affective regime exposing a risk of assumed subordination of bodies to technologies". This affective regime of the body to technology is a key regulation advocated and enabled through self-tracking devices, as well as competitive and comparative representations on social media. As outlined in the earlier chapters this demonstrates how the technology, and the individual user are both agents, co-existing and in some cases co-evolving together, however, this thesis does not frame co-evolving as a utopian growth, but a pervasive regulatory one, and in new materialist terms where the mind is conceived as a powerful domain to control the body (Moore and Robinson, 2016; Moore, 2017). This illustrates how bio-politics is enacted and operates on three levels within practices of 'governmentality': individual, technological and state.

5.3 'Health' Gamification

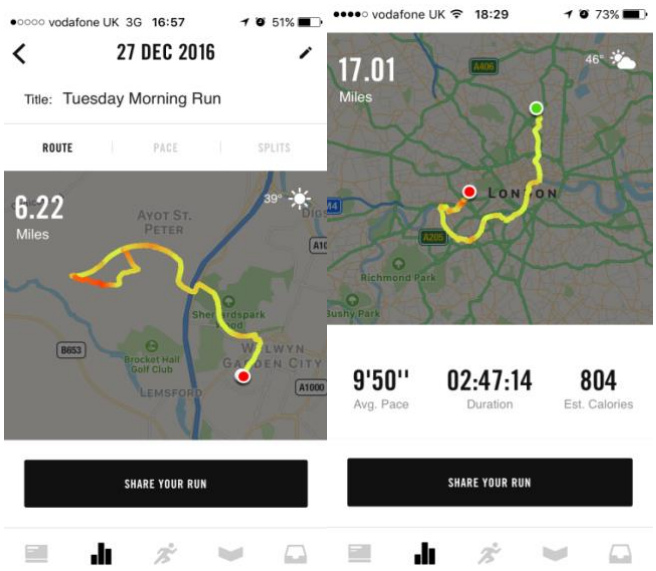

Fig. 4 & Fig. 5. Examples of Participant Shared Content

These individual, technological and state level bio-political rationalities become prevalent considerations and motivations for participants to 'gamify' their health as a tool for managing individual health. Gamification can be understood as incorporating game elements into a non-game context (Whitson, 2013). These mobile, wearable devices and applications were frequently considered a 'new toy' by the participants, demonstrating how both the technologies and their usage align themselves with a gamification of health. 'Health gamification' is enabled by digital health technologies, and applications that promise to make our everyday lives more like a game. With self-tracking technologies, this is enabled on applications through badges, points, graphs, and leader-boards, as well as through non-gaming activities like calorie counting, running, cycling or sleep tracking for example. Therefore, like the knowledge by numbers and knowledge by data discourses which surround both self-tracking and self-quantification, health gamification operates through an instrumentalisation of play and play by numbers:

> "I also set NRC [Nike Running Club] today to my goal distance. I did this as it was a new feature and seemed quite interesting. I didn't actually realise how motivating it was to have it count down how much further, which was really helpful" (Lou, Diary Entry, 29, F).

Therefore, health 'gamification' can be understood as a form of health strategisation, whereby users of self-tracking technologies use gaming and play to self-survey health behaviours and outcomes and work towards rewards systems like badges, medals or leadership boards on the applications themselves. Through Lou's diary entry here, we can see how improving upon time and distance became a key demonstration of self-maintenance, through individual regulation and self-improvement. This demonstrates the mediation and processes of persuasive or coercive computing (Purpura et al., 2011) in regard to digital health devices and practices, and governance of the (emotional) self (Foucault, 1979; Rose, 1999). This focus to maximise our happiness through scrutiny over and management of health, like with those fixated upon wellness-seeking, constructs a pervasive practice which "slowly edges out the rest of the world, what is left is the repetitive pulsation of the body" (Cederstrom and Spicer, 2015: 91). In this case the body adheres to technological sensors; it is moved and shaped in adherence to the design in motivation to achieve optimal goals and individual perception of success. As Lou expands in her diary when she explains the impact of the design 'nudges' in her Nike application, pushing and encouraging her to run further:

> "NRC meant I didn't cut my run short when it felt hard/ when I thought I was on my planned route, but had I not checked I wouldn't have run the full distance I needed to" (Lou, Diary Entry, 29, F).

Though Lou considers this a motivating aspect of 'nudging', it is important to recognise that these devices cannot take into consideration individual emotional wellbeing, physical stress or trauma within the data capture. The persuasive 'nudges' of these technologies is a problematic aspect of digital health devices, which needs to be addressed. If our behaviour changes as a direct result of being 'nudged' by a design driver, in response to wider socio-cultural and political priorities this leaves serious ethical implications in terms of the motivations behind such coercive design, as well as any implications upon individual health.

The increased self-knowledge gained through these applications encourages increased individual reflexivity, which is "embedded within particular normative discursive framings of choice" (Adams and Raisborough, 2008: 1171). Therefore, self-surveillance becomes an individualised pressure cycle of standardised meritocracy, further enhancing the increased need for self-knowledge (Langwieser and Kirig, 2010), as demonstrated by Lou's diary entry:

> "The marathon was the main goal. I was probably more in tune with pace due to it being more visible (on my wrist). Which was motivating" (Lou, Diary Entry, 29, F).

The game we are playing through self-tracking devices and platforms is about our human bodies, and most importantly our human capabilities. Health gamification therefore, is a game of self-governance, created through the feedback loops held within these devices, a management and enactment of self-governance and control, to manage health risks. We escape into games, but we also exercise our "hyper rationalised mind into managing an actuarial risk" (Whitson, 2013: No Page). In this regard, we understand health as something that needs to be managed and maintained, through the careful consideration of risk, ill health, disease and ultimately death. As Fotopoulou and O' Riordan (2016: 66) highlight, these "commercial tracking devices are promoted as leisure and fitness devices [which] places them in the category of knowledge for prevention, which is also experiential and personal". This 'gamification of health' then, can be understood as both a tool for play and health management through technology, which also generates ideological considerations related to extending mortality and preventing death. This can be best exemplified through the input versus output discourse of health, whereby participants gamify what they consume versus their physical expenditure, or exercise to effectively self-govern and regulate their health and self-improvement.

5.4 Input versus Output Discourse

The discourse surrounding self-surveillance and self-tracking seeks to tell us something about our bodies and encourages 'health optimisation' (Wolf, 2010). As Waltz (2012: 4) asserts: "seeing our own biological data in front of us – can affect our behaviour". The perspective was reflected in the research findings, whereby the mechanical workings of the body were reduced to a negotiation between inputs versus outputs (Gregory, 2014). This was a common interpretation amongst the participants, who perceived bodily health as an entity that needed to be individually 'managed' through the instrumentalisation of a controlling and powerful mind (Moore and Robinson, 2016). Such conceptualisations of the body as modifiable and interpretable through objective mechanisation reflect scientific ideals stemming from the nineteenth century, which reduced human interpretation to mechanical evidence (Kristensen and Ruckenstein, 2018; Daston and Gallison, 2010). The idea that human 'enlightenments' can only be achieved by 'objective machines' similarly reflects data utopian discourses, which promote the perspective that better health is only achievable by self-monitoring through self-tracking data. However, this is only achievable if you have the willingness and self-discipline to respond to and act upon such information. Whether the information provided tells the participant anything 'new' or indeed helpful at all is open to question. The research findings identified that this commitment to self-discipline often manifested itself as a personal responsibility and control over one's health, which was experienced either in terms of positive feelings associated with 'healthy' actions, such as exercising or eating healthily, or in terms of negative associations with inaction or unhealthy traits (consuming junk food or not exercising, for instance). These practices reduce "human experience to inputs and outputs [and] raises the questions: am I man or machine?" (Purpura et al., 2011: 6). Furthermore, another question can be asked: am I both, and how do I negotiate between my human interpretation of experience and mechanical evidence of my experience? Take Tim's example below, which

demonstrates that his work commitments have a big impact on the leisure and free time available in which to exercise or prepare healthy meals. Many of the participants recognised that the availability of free and leisure time outside of work was a key factor in enabling or preventing 'healthy' decisions and lifestyles. Tim is a keen yogi and posted daily about his practice and development. With his focus on yoga, and constant sharing of his practice there was not much time left for preparing 'healthy' meals:

> "Pretty much every Thursday after yoga class me and Jake* go and get a kebab on the way home. It's because there's a very nice kebab shop next to where that is and you can justify it to yourself. I would feel bad, (…) if I didn't exercise so much. If I didn't do lots of yoga or go to the gym then my diet would actually be better than it is now. I think sometimes I almost sacrifice eating well to exercise more (…) If I don't exercise on a certain night, that's the night I tend to eat the best because I've got the time to do it" (Tim, Final Interview, 34, M).

Tim frequently sacrificed making, in his own words, 'healthy' nutritious food so he could exercise instead, because he felt food shopping and meal preparation were too 'time consuming'. He frequently acknowledged that because he exercised daily, he was not overly concerned that he was not eating 'well'. Time spent at the gym and practicing yoga, to enable the documentation of his fitness and skill development on social media, became the priority, rather than buying, preparing and enjoying fresh, 'healthy' homemade food. Because Tim did not consider himself a 'foodie' or enjoy cooking, the expertise and 'health' status he wanted to represent online was of his fitness ability. Therefore, his leisure time was spent prioritising this over eating 'healthy' food. Tim presented himself online as a fit, able, experienced yogi, which became his dominant 'health' identity and provided the discursive underpinnings of his post; prioritising good 'health' as physical fitness and demonstration of yogic practice, over the nutrition he put in his body to fuel these physically intense behaviours and commitments. Tim was sacrificing 'healthy' food to exercise more, and indeed we can critique and question how (un)healthy this actually is. The time prioritisation is an interesting aspect here for the participants, in terms of the time allocation and justification for different tasks (exercise versus rest, or exercise versus preparing 'healthy' food). Such a balancing act demonstrates challenging health contentions for these individuals in their everyday lives. These input versus output discourses, which present management of the body like a machine (Purpura et al., 2011) prioritise intervention, through prevention or rectification (Moore and Robinson, 2016; Moore, 2017). These strategies of intervention cultivate a habit of precaution, prevention, and pre-emption, whereby health can be 'maintained' and improved by prioritising some 'healthy' behaviours, such as exercising, over others. For example, consuming junk food or alcohol could be rectified by enacting 'healthy' behaviours once again. A lack of response to device information or nudges, and a general lack of self-surveillance means that the individual management of 'health' may fail, due to a lack of monitored intervention. One of the reflexive diary questions asked participants what, if anything influenced their health decisions? Frequently, users identified that by managing 'healthy' decisions the following day, they felt they could 'rectify' earlier

poor 'health' management, demonstrating the dominant proliferation of the input versus output quantification discourse surrounding health optimisation (Gregory, 2014). This was demonstrated by Tim's love of 'junk' or 'unhealthy' foods, which he felt he could 'work off' in the gym:

> "What I was eating at the time was mostly influenced by what was available nearby and what I had time to eat/prepare. Which was mostly Greggs and takeaways (…) time to purchase and prepare food at this time was so small I caved in and went with the easy options. I did however exercise extra hard this night in an attempt to burn off those extra calories from all the junk food!!" (Tim, Diary Entry, 34, M).

Tim ate 'convenient' foods but legitimated and accepted this, as he could 'make it better' by working off the calories in the gym and not focusing on or avoiding the fact he was not eating nutritious foods. The participants recognised that exercising meant they did not feel guilty about eating 'unhealthy' foods or consuming alcohol:

> "Had a good run, did feel able to go out later on without feeling guilty about eating/ drinking later on" (Lou, Diary Entry, 29, F).

Interestingly, the discourse of 'rest days' enabled participants' to have guilt and shame free 'lazy' days:

> "Today was a full rest/cheat day for sure! Motivated by weeks of being active, eating reasonably well so I figured I deserved a lazy day!" (Tim, Diary Entry, 34, M).

Through extended self-surveying practices to maintain self-regulation and 'healthy' behaviours, the participants overall felt productive by managing their 'health' to enable self-improvement and the propagation of 'healthier' bodies, which was positively interpreted. Annie interpreted these positive feelings as feeling better through eating well and feeling 'good' about adhering to self-proclaimed goals around diet:

> "I've been quite good with my food, and it definitely does make me feel better… I find eating rubbish makes you feel 'greasy'… I don't like feeling greasy! ☺" (Annie, Diary Entry, 28, F).

The overall discourse acknowledged by the participants however was that eating badly or not exercising can be rectified and 'overcome' by exercising harder, minimising calories or eating 'healthier' nutritious food, regardless of what one has previously put into their bodies. The participants perceived the pre-emption of the 'negative' effects of unhealthy behaviours or consumption to be rectified by intervention, via 'healthy' practices.

When we think about the temporal nature of the practices subsequently adopted through poor 'health' management or behaviours, the dominant discourse advocates that the poor choices

surrounding 'health' can be immediately overcome by an instantaneous lifestyle overhaul and 'personal rehabilitation' (Cederstrom and Spicer, 2015: 134). Regardless of the way lifestyle behaviours may have been in the past, and whether they can be rectified, the body and 'health' can be immediately transformed into a 'healthy' subject through self-surveillance, regulation and self-discipline. This discourse advocates that the body works like a machine that harnesses an input versus output engine, which prescribes that if you eat 'unhealthy' food or drink (input) you can rectify the extra calories by burning this off (output):

> "I ate the pasta because I was going for the run. I wouldn't eat pasta on a non-cheat day, so it worked out well" (Sophie, Diary Entry, 31, F).

Sophie explained that she ate the pasta because she was going for a run, and it was a cheat day (she would never eat pasta on a non-cheat day). Certain 'unhealthy' or carb-heavy foods have to be made 'legitimate' to eat not just for pleasure' but for a 'cheat day'. After further questioning this practice in her final interview, Sophie expanded that her 'cheat day' legitimates pasta (recognised as a 'bad' carb-heavy lunch), but then further excuses this 'cheat' by saying it will help, fuel and therefore aid her run. Sophie and many of the participants conceptualise their bodies as engines or machines. In essence, what you put in, you will get out. This mechanical approach was embodied by all the participants, which they interpreted as re-addressing the balance of 'health' through individual self-disciplinary behaviours. This discourse suggests and supports a proliferation of the discourse, which argues that self-surveillance and tracking will transform and revolutionise health-care (Bottles, 2012; Moore and Robinson, 2016; Moore, 2017). For example, as Wolf (2010: No Page) suggests: "numbers [which they are tracking] hold secrets that they can't afford to ignore, including answers to questions they have not yet thought to ask". The user can subjectively decipher the objective nature of statistical self-quantification and tracking, as no finite goal is outlined. Beato (2012) argues that 'self-trackers' monitor to increase control over their own lives. This perspective, however, removes any agency from the technology.

As Swan (2012a) outlined, there is a paucity of literature that addresses the reality of these claims, by examining the process undertaken by users. This thesis examines this gap and identifies that the accumulation and examination of data causes extreme self-regulating pressures for self-trackers, thus provoking stress and anxiety. As Purpura (2011: 7) asserts, this occurs: "by pulling quantitative measures to the foreground over qualitative ones and usurping the normal situational human decision-making process". This dissolves the division between the interior and exterior of the body and blurs the distinctions between the biological, the social (Rose, 2013) and the technological. Purpura et al. (2011: 7) highlight how these "borderlines between encouragement, persuasion, and coercion, and specifically with who should be in control of individual behaviour [are blurred]. Persuasive computing (...) participates in and reinforces broader troublesome cultural trends to control the body". Therefore, participants are presented with a cultural construction and 'datafication' of their bio-metrics, over a physical construction of their bodies. This individualised, internalised, self-policing discourse pertains to all individuals, who must

maintain healthy behaviours through a continual cycle of self-management and self-care. As Lara recognised:

> "It is interesting that something has forced me to take that look on my life" (Lara, First Interview, 28, F).

This 'forced' recognition within self-tracking devices ensures that capturing and sharing data is based upon what the device deems to fall within categories of importance, in this case food, drink and exercise. From Lara's account, we are reminded that data is not neutral, as it is selective about what is and is not captured. As Duffy (2014: No Page) asserts: "data scientists are storytellers, interpreters. They take slices of information from the data-sphere around us and translate them into something for us to consume". The 'meaning' making from the data visualised extends further than Duffy *(ibid)* proposes here. In fact, rather than providing something for the user to consume (and then share), the visualisations are inductive, and enable the creation of a data story that: "shape[s] assumptions and promises of visibility and knowing, further connecting to research on how digital devices and the data that they generate configure knowledge spaces in society" (Ruckenstein, 2017: 84). As acknowledged by Jennie:

> "It gives you the visual reminders and cues for staying on track" (Jennie, First Interview, 40, F).

This spreadsheet input versus output approach to managing health is problematic and oversimplifies the complexities of the human body, whereby design prompts directly impact 'health' practices. Reflecting Moore's (2017: np) argument that "machines are tools of quantification and division, compartmentalisation and potentially control". This is particularly applicable to the area of human instinct. For example, when a running application prompts a user who is feeling unwell to go for a run (and there is no way to 'track' or 'monitor' a virus), physical exertion might make the user more unwell, but the device nudges them to go. Therefore, the question remains: Who do you listen to, your disciplinary exercise regime, your device or platform, or your body? These practices perceive the plasticity of the body and brain as malleable, through calculated forms of intervention, for example exercise or eating 'healthily'. This malleable approach to the body and 'health' management ensure the presentation of calculated interventions (health and wellness apps, platforms and lifestyle advice), which promote health as an entity to be individually managed.

5.5 Technological Issues related to Self-Tracking

As briefly covered in the previous section, diligently using self-tracking apps or devices provided the participants with fitness or health goals, but they expressed concerns, as this often felt regimented in some way. When asked in the interviews to interrogate these restrictions further, the pressures felt by using the applications were often resolved when they simply removed the tracking device from their health or fitness regimes. As demonstrated by Lara:

> "I felt freer not using the app fully. Like I could just get on with it with no expectations, just take it for what it was. It was nice not having the music too for a change" (Lara, Diary Entry, 28, F).

Many of the participants expressed a feeling of being 'free' once they stopped using self-tracking devices, applications and social media. Contrastingly, when participants did want to use the technology to track 'health' and fitness-related activities, they were relieved when the device worked efficiently in tracking their movements. As Lou explained in her diary:

> "Happy run was recorded. Relieved app hadn't crashed/ drained my phone battery on the run. Sense of completion. On training plan and for workout" (Lou, Diary Entry, 29, F).

The participants' feelings of completion related to capturing their practices, as well as achieving set goals, were often peppered with both simultaneous relief and anxiety over whether the application would work effectively and a concern that this would affect their activity:

> "Satisfied I would be tracking our distance - to make sure we'd run far enough, but also a bit stressed that my phone would die part of the way through (it did). Using Nike + today was frustrating, it made me want a more secure/ better way of run tracking. Excited (to have a new toy to play with), satisfied that I was able to track the run and then link it to Nike + too so it keeps up with my previous tracking" (Lou, Diary Entry, 29, F).

This research data supports existing literature, which exposes the inaccuracies of these devices and the data collected, particularly around partial or incomplete recordings (Beer, 2009; boyd and Crawford, 2012; Cheney-Lippold, 2011; Mort and Smith, 2009, Ruppert, 2011; Lupton, 2013c). Consistency of capturing data with every run, workout, or meal was a real concern, as if effective this led to an accumulative data trail, life-logging and a self-tracked representation of activity. However, it is important to recognise that these findings do not advocate a utopian data double but rather a fabricated and carefully curated construction. This was often indirectly due to the applications' or devices' variable efficacy and precision (Lupton, 2013c, 2013a; Van Remoortel et al., 2012): As Lou wrote:

> "Before [I felt] - general uncertainty whether or not whole run will be recorded. Concern is mainly for reaching required distance" (Lou, Diary Entry, 29, F).

Frustrations were frequently experienced when the technology did not efficiently track distances due to the failure of the application itself or the device battery, which undermined its credibility:

> "I couldn't use my tracking app as I was in a rush and it was taking particularly long to load prior to my ride. If I had waited for it to load, I was afraid that I was going to miss my train.

> I didn't want to give up an extra 2 minutes in bed, so I can have 2 minutes fiddling on my phone (…) Whereas before when I had a stopwatch, I'd go in and 'click' 'click'" (Fet, Diary Entry, 30, M).

Anxiety around the fallibility of the apps was a frequent concern for the participants and they often mentioned their unreliability (Mol, 2009). Frustrations related to the 'real' or offline world (stopping at a pedestrian crossing, for example), affected the overall statistics within the users' set goals, tending to produce emotionally embodied pressures. The fallibility of the apps, when data is lost or incorrectly captured, is a real concern for self-trackers. Reliance on the correct and continual visualisation of data provided the participants with gratifying evidence of their physical accomplishments (Ruckenstein, 2017), demonstrating their reliance on data capture of physical activity. The participants' perspective supports Rettberg's (2018: 29) argument that: "we may even trust our devices more than our own experience". Similarly, applications and devices were often considered not very user friendly (Oudshoorn, 2011). As Lara wrote:

> "I'm still trying to figure out the watch! I think I just find it useful to know how far I'm running" (Lara, Diary Entry, 28, F).

Similarly, the other participants found that 'getting to know' their device or application was disruptive of their practices:

> "It did make me feel slightly distracted at times and for the first 5-10 miles a little bit too worried about pacing (…) got a bit too hard to just look at the watch all the time" (Lou, Diary Entry, 29, F).

Additionally, scrolling and viewing others' practices provided a distraction for the participants, and arguably other users. Whilst this can sometimes encourage and support their 'health' and fitness practices and sharing, the distraction related to viewing others can sometimes be a barrier to enacting certain 'healthy' behaviours.

5.6 Work and Lifestyle Influencing 'Health' Decisions

As identified briefly earlier in the chapter, balancing work and the availability of free time was a big influence on the participants' ability to exercise and make many other life and health-related decisions. All the participants were fully employed (without dependents) at the time of the research and found it difficult to juggle the maintenance of individual health goals, work and social life. As Roy asserted:

> "[I] started working full time which means I have less time to work out. So that certainly has had an effect on my training but it's primarily been due to moving rather than anything else" (Roy, Final Interview, 26, M).

Relocating, starting a new job, or other reasons for lacking a 'leisure' time, were the key issues for the participants not being able to exercise, which led to deliberations about what should take priority. This differed between participants, although all felt an internal contention and guilt towards not exercising and eating well, interestingly even if they did nothing about it. For example, Lou's free time was consumed by either exercising or socialising. She found this particularly tricky living in a busy city:

> "[in London] there is always an opportunity to do something. There's always something that you're probably missing out on. It's almost like a self-perpetuating cycle of feeling guilty because you're missing out on stuff but that's because there's so much stuff going on you have to miss out on some stuff but then having to prove you're at other stuff, which is then just ridiculous. Again, you're just like turn your phone off and go and do something without having the need to Instagram it or share it" (Lou, Final Interview, 29, F).

The social pressures to see people and find time to exercise are a real struggle, especially in a busy city where exercise is rarely considered to be the top priority. Furthermore, the documentation of one's 'fun lifestyle' was an ongoing consideration for the participants (this is further examined in the following three analytical chapters, Six – Eight).

Most of the participants completed the reflexive diary from January to March (2017), with first entries focused on trying to get 'back in shape' after an 'over-indulgent' Christmas. For example, Lou was training for the London marathon and was reflecting back on her December (2016) in relation to her training plans:

> "Over indulgence of Dec and being time poor - as are all Londoners in December, combined with the impending marathon. I think I got to January and was like oh god, it's this year now, whereas before when you get the place you're like it's April, I've got loads of time but then all of a sudden, it's here" (Lou, Diary Entry, 29, F).

Managing training around work, holidays and social commitments was an ongoing balancing act. This felt particularly demanding in the lead up to Christmas when the participants' social lives were busy. Lou refers to the marathon as 'impending', a looming presence in her life, which, as it nears feels at times oppressive and consuming:

> "Before I'd always been a bit of a 'yes man' and be like of 'course I can come in'. But when you've got that stringent plan in front of you, you're like I could but I'm just going to be stressed about the fact that I haven't run 11 miles and then come April I'm just going to screw myself over because I didn't follow the plan to do a bit of work that could have been done without me if I'm honest" (Lou, Final Interview, 29, F).

Regimented training plans combined with the expectation to always 'love' exercise' as well as work, ensured that the participants' self-surveillance and regulation became focused around attempts to fall in line with these neoliberal self-responsibilising discourses:

> "I think advertising in general is one of those weird industries where everyone is expected to really love it" (Lou, Final Interview, 29, F).

The participants identified an expectation to 'love' their work, particularly those working in the creative industries, such as advertising and other digital forms of labour (Hesmondhalgh, 2007; Terranova, 2000; Florida, 2005). Like the 'healthist' neoliberal discourses, which celebrate the prioritisation of 'health' in all aspects of life(style) (Crawford, 1980; Davies, 2016), in neoliberal capitalist societies, the creative class (Florida, 2005) and 'digital labourers' work practices (Terranova, 2000) becomes similarly integrated into all aspects of individuals' life. Promoted through the 'Californian ideology' (Barbrook and Cameron, 1995: 1) these types of work are promoted as fun, entrepreneurial and empowering professions, thus blurring the lines and divisions between leisure time, paid employment and 'work' (Florida, 2005; Hesmondhalgh, 2007; Terranova, 2000; Moore and Robinson, 2016; Moore, 2017). Being overworked and working 'overtime', cutting into leisure or 'unpaid hours', similarly impacted upon the participants' inability to exercise or make 'healthy' choices:

> "I was working a lot, was tired and a little stressed with work today. I hadn't been able to put as much time into exercise as usual and that was getting me down a little. Partly because I enjoy it so much and missed it and because I knew I wouldn't be improving. If anything, I'd be going backwards. Also, I know that when I exercise/practice yoga it relaxes me and is a good way for me to let go of things" (Tim, Diary Entry, 34, M).

As Tim explains here, not having 'enough time' to exercise 'gets him down'. This is because exercising makes him feel like a 'better' person who is continually improving. If he is not exercising he perceives his 'health' and body as in decline:

> "In my mind if I was to come home and not do any exercise, I'd be declining every day, my body would be getting older, it would be getting less strong, less flexible, less active" (Tim, Final Interview, 34, M).

Many participants conceptualised a lack of exercise or 'healthy' lifestyle choices as a form of physical decline, particularly related to ageing. If the participants were not exercising, they interpreted this as their body ageing at a faster rate. Interestingly, exercise was considered to reverse or at least prevent the natural ageing process. These fears of 'growing old' provided another motivation to improve 'health'. This reflects the malleable, input versus output discourse discussed earlier in the chapter, whereby individual interventions related to 'healthier' choices were perceived to drastically reverse, rectify or transform the body and individual 'health'. Many of the participants felt that if they were not continually exercising or maintaining 'healthy' choices

they would become stagnant, not developing and at worst regressing in terms of their personal fitness or 'health' optimisation.

Preparation was considered a key aspect in preventing health deterioration when work was busy:

> "If I had been better prepared perhaps, I could have ensured I drank more water etc. I feel I'm in a bad pattern at work and my health deteriorates if I don't make a huge conscious effort to look after myself ahead of time. I'm stressed at work and didn't get a chance to eat whilst there, even though I had prepared food. No time for exercise whatsoever" (Lara, Diary Entry, 28, F).

'Bad' patterns and habits including being overworked meant that 'healthy' decisions could not be enacted, no matter how organised the participants were. Though they frequently had no control over this, frustrations related to not having enough time to be 'healthy' did develop frequently into feelings of guilt and shame associated with mismanagement, which was perceived as 'poor planning':

> "There were a lot of external factors, but I had a lot of choices within them too. I had work, but I knew I had work and I didn't prepare around that properly, I know what I can do, and I did nothing" (Lara, Diary Entry, 28, F).

Although Lara arguably had limited time to prepare healthy meals, in this case, she still felt unprepared and thus lacking in self-regulation to ensure 'healthy' practices could be maintained. This in turn led to feelings of guilt and shame that she 'could' and 'should' have done more to make 'healthier' choices.

Advertising both online and offline, particularly in January when most of the participants were completing their reflexive diaries was also acknowledged as an influence on their 'health' and lifestyle choices:

> "The rise of health and fitness advertising posts in the run up to January definitely had an influence –[from] apps, gyms & influencers" (Lou, Diary Entry, 29, F).

The participants explained how this reminded them to 'be healthier', in whatever way that was subjectively interpreted, clearly demonstrating how the consumer apps, devices and social media that promote 'healthier' activities nudge and advocate their use, which in turn pushes participants' behaviours to respond. This is a clear example of the persuasive and coercive nature of both advertising and these technologies, achieved through the process of 'nudging' (Thaler and Sustein, 2009: 4). When the participants were mentally and physically able to exercise, this reminder to do so through commercial advertising was not always considered a negative push, especially if they felt that the activity or a focus on 'healthy' lifestyle behaviours provided an escape from stressful or intense work, and social or family time during holidays. As Lara explained:

> "Marathon training, [enabled me to get] out of the house for a period over the intense Christmas period" (Diary Entry, 28, F).

In this regard, her training schedule was a welcome relief, providing a reason to leave the house during the Christmas break at home with her family. Lou also found that her marathon training provided a similar form of respite when she felt overworked:

> "It did help define me outside of work at a time when my identity had been consumed by work, which was a relief" (Lou, Diary Entry, 29, F).

For the participants, exercise or focusing on maintaining or transitioning towards 'healthier' lifestyle shifts frequently provided them with time and space to examine their mental 'health', relieve stress, and escape work or intense situations. This perspective resonates with Calhoun's (1962b: 139) theory of the 'city getting in to the brain'. This theory describes how increased cortisol and stress levels in the amygdala, can be elevated by being in crowds and busy spaces. In turn, this is harmful to human immune system response reducing immunity (to illness and disease) in the body. Those participants who were living in cities recognised the role of exercise to enable feelings of escapism from city life, which they interpreted as a stress reducer. Interestingly, they viewed this as providing them with a sense of 'health' identity and personal solace outside the all-consuming and at times overwhelming environments they found themselves within. Lou found a way to use her 'free' time to explore more of London during her marathon training:

> "I did sort of realise that I can only go those long distances if I'm going somewhere new. Having lived in London for four years that's obviously harder because there are only so many places you can run but I'm way more motivated if I've not actually run that way before. For me that makes it more appealing, the fact that I'm using the running to go and explore bits of London that I've not been to. That became a lot of the posts that I was sharing, the new stuff that I had found" (Lou, Final Interview, 29, F).

The self-motivation to run, therefore, is also achieved by wanting to explore new places. The life-stylisation of health and fitness is clearly demonstrated in Lou's account. Lou would often pose the question to herself: 'where can I go that is new today to motivate a long run'? However, all the participants identified that there always had to be a sacrifice somewhere, whether that was with work, leisure, social time, 'healthy' food or exercise.

Financial commitments were also a motivating factor to maintain goals. As Lou attested:

> "I think it's a bit of a weird one, the first marathon I got injured in training and basically it was in Berlin, so I'd signed up and payed for my flight, so I was just like I'm going to do it. I don't care if I'm injured and I shouldn't. I had committed a lot to it, financially as well as just in time and effort" (Lou, Final Interview, 29, F).

As demonstrated in Lou's and the other participants' cases, this financial commitment can be seen as a priority, over physical and mental 'health'. Signing up to marathons, gym memberships or products and services often meant that the participants undertook certain behaviours and activities because they had committed financially and had not wanted to 'lose out', even if they were not physically or mentally able or motivated to do it.

5.7 Self-Surveillance and Body Image

Self-surveillance and the associated self-regulatory and disciplinary practices intensified when participants became concerned over their body image being scrutinised by others. Body image is understood as the perception that a person has of their physical self and the thoughts and feelings that result from that perception (Shilder, 1935). These feelings can be positive, negative or both, and are influenced by individual as well as environmental factors *(ibid).* Whilst body image perceptions are an interesting and evolving field, affective neuroscience literature, for example, has attended to this debate (see Tiggerman, 2011; Panksepp, 2005; Perloff, 2014). This thesis, however, is concerned with how self-surveillance and the associated tools that enable it, such as social media and self-tracking devices, affect the participant's perceptions through offline interactions with others, including peers, colleagues and even strangers:

> "There was a couple of times after the gym where I've been into the co-op [supermarket] and I've picked up a ready meal because I couldn't be bothered to cook and then I bumped into someone from the gym and I actually just felt so guilty, and I was so embarrassed about what was in my basket" (Sophie, Final Interview, 31, F).

For Sophie, this embarrassment about individual food choices and being 'caught' in the act of eating a 'cheat meal', for example, ties into discourses of shame around a lack of commitment to certain 'health' practices, a mismanagement of health or a lack of self-discipline. These findings reflect Kristensen et al.'s (2016) researched that examined how food choices and in particular shopping baskets offered insights into the moral character of citizens, and in relation to this thesis how this may be perceived, presented or performed. Illustrating Cederstrom and Spicer's (2015: 7) argument that "eating has become a paranoid activity (…) It puts your identity to the test". This is also intensified by talking extensively about goals or challenges to friends, family or colleagues, as well as by posting regularly about it, which ensures there is a front to maintain: a façade of a 'healthy self'. In this way, Sophie also felt a big pressure from her gym community and social circle to look a 'certain way'. As argued by Heyes (2006: 126) "people diet because they act on false beliefs about the possibility and desirability of losing weight for the sake of their health", physical appearance and performing physical transformations. Sophie spoke openly about a 12-week challenge, which involved dieting and specific exercises, and was concerned that those she had spoken to would expect her to look 'transformed':

> "It's weird. Sometimes my head just feels in a bit more of a positive kind of place but then at the moment I know I'm going to Ibiza in 8 weeks so that's it" (Sophie, Final Interview 31, F).

Being a healthy role model was an ideology most of the participants embodied. Whilst they gained positive feelings from this recognition from their peers, this also contrasted with feelings of internalised pressure, to behave and perform in certain ways:

> "I feel I have a reputation amongst friends for being fit, healthy and strong and therefore feel responsible for sharing my lifestyle in an attempt to inspire, motivate and lift others up with me. Which in turn helps me with my internal goals of health and fitness" (Annie, Diary Entry, 28, F).

Foucault (1984: 27) understands this as 'assujettissement': the process of at once becoming a subject and becoming subjected. This is emphasised through technologies of power, which present themselves as technologies of the self, discursively embedded within dominant patriarchal and disciplinary practices. Reputation management amongst online and offline networks became an ongoing consideration for the participants. Lifestyle then, becomes representative of body image, while self-identification is achieved through self-transformation and life-strategising technologies, which enables one to compete within a community, and is further encouraged through self-tracking practices (Urry and Elliot, 2010). As Sophie wrote:

> "I wish I hadn't told anyone I was doing this challenge because I feel like I've put too much pressure on myself to look good enough at the end of it and also what food I am seen to be eating. If no one knew about it then they wouldn't be looking at me and expecting me to look a certain way" (Sophie, Diary Entry, 31, F).

The participants frequently spoke about a pressure to look 'good enough' or a 'certain way', which was usually in comparison to how their peers around them would perceive their body image. This ideology operates through oppressive patriarchal discourses of fat shaming, myths around what constitutes 'good' health and weight, and idealised body shapes (Heyes, 2006). For the female participants, wanting to look a 'certain way' also sat in line with the visual representations of the female body on Instagram (yogis or runners, for example); a slender, fit, heteronormative gaze of a sexualised, and idealised body shape (Elias and Gill, 2016). Interestingly, only one of the male participants raised concerns about their body image or how they were physically perceived, both online and offline; Matt became concerned about weight gain and body image when he was unable to exercise due to illness (Diary Entries and Final Interview, 41, M). Whereas all the female participants spoke about concern over how their body was perceived. Lara frequently spoke about how she compared herself to other Chamonix residents:

> "Chamonix is full of a lot of healthy athletes and hearing their stories is inspiring, I always feel well below par compared to them" (Lara, Diary Entry, 28, F).

In her final interview, Lara explained how she would not feel as much pressure to be so active if she were living in a large city (like London, for example), which was not focused around seasonal sports such as skiing, snowboarding and mountain biking, as Chamonix is. Physical location, as well as seeing others' 'active' lives online leads the participants to compare themselves and their fitness levels to others. Lara concluded that because she lives in a seasonal sports town, she feels the need to be active. Lara also expanded that she felt that other women in Chamonix perceived her body image negatively:

> "A friend and I found out another group of girls have been rude about us and our 'outdoorsy- ness' or lack of it in their eyes, and how much we drink. I've always kept myself surrounded by people who are mostly uplifting of each other so was a bit annoyed by these comments (…) I do feel it has an impact on how you view yourself and your health. I think I'm quite comfortable in my own skin. Obviously, there are things I'd like to improve upon, but that comes from myself, not from others' views. Having said that, I do feel an element of pressure to prove them wrong" (Lara, Final Interview, 29, F).

Lara demonstrates how much a poor perception of one's body image (if known by the individual under scrutiny) can impact dramatically on that individual's self-esteem, sense of self-worth and personal identity. Prior to hearing about these derogatory comments from other peers and 'friends' in Chamonix, Lara felt confident about her body and 'health'. She acknowledges that there are aspects she would like to 'improve' but the desire to do so comes from (to an extent) her own goals, rather than pressure or comments from others. Once she hears (by word of mouth) that other women perceive her and her social circle to be 'unhealthy' (heavy drinkers) and inactive, she feels a desire to want to change their perception of this as it does not line up with or mirror how she perceives herself. The participants rarely received derogative or negative feedback from their peers in relation to sharing content on social media. In offline situations, however, any perceptions that did not match their own sense of body image were a cause of stress and potential embarrassment. The participants were continually self-evaluative, which led to a constant self-surveillance, and in turn, regulation and discipline related to consumption, exercise and any health-related practices. This continuous reflexive and self-evaluative cycle also incorporated a simultaneous consideration of upholding or amending others' potential judgments of their personal body image. In turn, lifestyle change or 'lifestyle correction' (Leichter, 1997: 359) is often considered the only way to respond to perceived poor body image. The practices adopted, and the self-presentation moulded or constructed in consideration of imagined judgments from the wider social media and offline community, are examined in further detail in the following analytical chapters (Six, Seven and Eight).

Enacting healthy living for the benefit of others was a challenge the participants related to being a 'role model', whilst simultaneously trying not to instil their self-policing pressures on others. This 'aim' to present oneself by way of being an 'example' to others could be conceived as a way of legitimating narcissistic practices of self-representation. Yet, for participants who placed a huge amount of self-regulation upon themselves (and corresponding feelings of shame or guilt if not maintained) did feel a desire to prevent their networks (online and offline) from embodying the same pressures. As Sophie wrote:

> "It's really shallow but I'm going [to Ibiza] with a group of girls and if I'm honest they look up to me, they look at me as the fitness, healthy one, I hate it when they come to ask me is this ok to eat" (Sophie, Diary Entry, 31, F).

Interestingly, the participants became experts in identifying and reflecting upon their own self-policing practices, whilst trying to protect and shield those in their social circle who admired their behaviours from adopting the same negative self-policing and self-regulation, which arguably damaged their self-esteem:

> "I feel like a role model and therefore I am responsible for influencing others" (Annie, Diary Entry, 28, F).

These ways of using 'technologies of the self', lead to the creation of a self-surveying subject, who attempts to 'discipline' an 'unruly' body (Gill, 2007a: 152), and then represents that transformative struggle for the benefit of guiding others. This places a huge amount of pressure on many of the participants to be seen as 'the healthy one' by their friends and colleagues:

> "It's so much pressure. It's like, we're going with Sophie* one of my friends was like 'you're so skinny', I don't want to be skinny" (Sophie, Final Interview, 31, F).

In addition to being seen as health or fitness 'obsessed', the stigmas attached to being skinny are similarly a concern for the female participants. Being skinny is associated often with eating disorders, and therefore poor mental and physical health, which these participants categorically do not want to be associated with. Sophie has suffered with bulimia in the past and spoke about feeling like a 'fake':

> "I had an eating disorder, I was binging because I was feeling depressed (…) then I was like I shouldn't have eaten this, then I was making myself sick and throwing it up. I can talk about it its fine, but I was like oh I'm a massive fake" (Sophie, Final Interview, 31, F).

Being slim and controlling calories were assumed to demonstrate 'acts of health' (Goodyear et al., 2017: 7). Sophie felt comfortable discussing her eating disorder with the researcher, in the private interview space. Although she had been through a serious mental health issue, she still felt like a

'fraud' to her friends, family and colleagues, as she was promoting her 'healthy' lifestyle to them whilst still struggling with this disease. Sophie did not consider herself as 'in recovery' from this illness but still embodied feelings of regret and remorse, as well as anxiety about her perceived lack of self-discipline since she could not 'overcome' this illness. In this way, representing herself as the 'healthy one' to friends, family and colleagues could be conceived as a way for her to compensate for her guilt associated with her illness.

5.8 Conclusion

This chapter has provided an in-depth critical analysis of self-surveillance and self-tracking practices, critiqued from the perspectives of the research participants and analysis of the empirical data. Literature and discourses around self-tracking technologies and self-surveillance once celebrated science and technology as revolutionary, emancipating the citizen to undertake 'health' regulation to 'optimise' individual 'health'. This chapter has identified how participants become adherent to dominant neoliberal discourses of active consumers of health (Davies, 2016; Tritter, 2009), through self-surveillance of the body and individual health, achieved via the use of self-tracking devices. Thaler and Sustein (2009) argue that foreclosing health choices through technological affordances is ethically sound, if it is in the 'best interest' of the user, overriding any ethical considerations concerning other factors such as persuasion or coercion by design. This chapter and this thesis critiques this perspective and argues that the technological quantification as well as the issues associated with social media and self-tracking technologies ensure a gamification and at times an over-simplification of health and the body. Furthermore, as Moore (2017: np) argues "Nudge as a method has been met with some scepticism and reflects a commitment to actively bias people in ways that could easily be seen as 'creepy'". Alongside work and lifestyle influencing health decisions, these digital mediations of individual health practices (whether shared or monitored personally) contribute to anxieties related to a perceived lack of self-discipline, poor body image and other problematic aspects of self-tracking such as invasive (self-) surveillance and invasions to person privacy.

This chapter identified that self-surveying through self-tracking does not equate to 'optimal' or better 'health', as promoted by the corporations who develop them and the state, which advocates their use. As this chapter argued, humans cannot be objectively measured within input and output parameters, as these are de-humanising (Purpura et al., 2011). Furthermore, the devices themselves were unreliable, which became a source of real anxiety for the participants when they were unable to self-survey through self-tracking technologies. Control and responsibility over 'health' frequently takes precedent over other unquantifiable 'health' or lifestyle issues. Such self-definition through endless self-tracking maintains the optimisation of 'health' as the continual lifestyle aim. It became a real strain for the participants to enact and manage 'health' as their first priority, over other aspects of their life(style). For example, work, social life, or even eating 'healthily' frequently became overshadowed by placing a priority on 'exercising', even if they were suffering from poor mental or ill 'health'. The participants performed the production of an

optimised future, achieved through the perception of removing problematic elements of their bodies, 'health' and lives (Rose, 2007). Through self-tracking technologies, they tried to validate their experiences and understand who they actually were, in relation to their identities, their bodies, their health and their minds. Through this post-enlightenment view of our reliance upon and conceptions of evidence and proof, science and technology, rationality and objectivity, achieved by extending our human powers through science and technology (Adams, 1998; Moore and Robinson, 2016), we have convinced ourselves that we have technological control over our human behaviours, our bodies and our 'health'.

CHAPTER SIX

SELF-REGULATION AND THE MORALISM OF HEALTH

This chapter will examine 'health' fitness and lifestyle management in relation to neoliberal moral self-disciplinary discourses, which position the human being and body as a subject to be worked upon. This neoliberal ideology stemmed from a distancing from state interventions, through the promotion of the idea that individuals have a responsibility towards wider institutional, systemic and capitalist systems of control, which situate the 'indebted man' as the subjective figure of contemporary capitalism (Lazzarato, 2006). The 'indebted' population, therefore, is a paradoxical structure of neoliberal societies, whereby debt must be fulfilled in order to be free. As Rose (2007: 90) asserts: "subjects obliged to be free were required to conduct themselves responsibly to account for their own lives". The moral dimensions within dominant 'health' discourses are inherent within self-surveillance practices and the regulatory design of self-tracking apps, devices and the sharing of related content on social media. Within discourses of self-tracking and 'bad' health, self-worth can become tied to data (Carmichael, 2010). These 'health' surveillance and tracking practices intrinsically assign an individual moral obligation to preserve one's own health as public duty, free from state or institutional support (Knowles, 1997: 64). This discourse of 'shame' and guilt was identifiable within all the participants' responses and was embodied in relation to 'bad' and 'unhealthy' decisions. This positioning of 'shame' stems from a seventeenth-century religious discourse, which associates poor health with sinful behaviour (Brandt and Rozin, 1997; Cederstrom and Spicer, 2015; Mennel et al., 1992). This archaic discourse was strongly reflected in the research findings. This dominant discourse encouraged the participants to engage with 'health' moralism through the internalisation of shame, in turn encouraging self-regulatory and self-managing 'health' behaviours. These techniques of the self ensure that the participants confine 'health'-related decision-making processes within the parameters of perceived morally 'right' consumption choices, articulated through data collection, representation and interpretation (Fajans, 2013). This involvement positions the citizen as a consumer who actively makes the 'right' ethical decision for the management of his/her health and self-care.

This chapter will critique these discourses, to examine the problematic and moral issues that arise from adhering to such regulatory practices. It examines a (perceived) lack of self-discipline, health anxieties which legitimate inactivity, and lastly, the burden of self-surveillance and self-tracking. Self-regulation, therefore, can be identified as a heightened monitoring of self-surveillance, whereby this regulation may or may not impact upon behaviours, but may become modified in line with adhering to 'healthy' discourses, which influence the participants' sense of moral self as 'good' or 'bad,' 'healthy' or 'unhealthy' individuals. Self-regulation, therefore, can be understood as a step towards self-policing. Self-policing directly impacts upon and influences individual 'health' and fitness-related practices and behaviours. Self-discipline, then, is the adherence to rules and self-regulations, advocated through societal discourses surrounding the moralism of 'health'. Furthermore, this dictates behaviour modifications, in relation to what makes a 'healthy' or

'healthier' individual, in whatever capacity that is subjectively determined or interpreted. Of course, subjectivity must be recognised within these decision-making processes. However, this chapter will situate these practices of self-surveillance, regulation and discipline within wider neoliberal socio-economic, cultural and political discourses of individualised responsibility towards self-care.

6.1 Self-Regulation

The morals and values ascribed to 'health' and 'illness' are fluid and constructed socio-culturally, rather than existing as physical concepts or states of being (King and Watson, 2005: 37). Within the neoliberal focus on lower healthcare costs, higher risks become associated with higher costs and their moral consequences, in turn linking health risks with individual moral decision-making (Cederstrom and Spicer, 2015). As Buyx and Prainsack (2012: 81) assert:

> If we feel pressured by our social and political environment to undertake every possible preventative and predictive measure to learn about and decrease the existing risks, and if we invest more time and effort in this, we may feel a grudge against those who spend their time and money in more pleasurable ways, and who therefore, we think, incur additional risks (read: costs).

This perspective is problematic as it assigns degrees of risk, based upon individual lifestyle choices, which assumes direct causal links between the two. This is not a satisfactory explanation, as it is sometimes impossible to prove why a particular condition affected an individual *(ibid).* For example, as the previous chapter ('Self-Surveillance and Self-Tracking') identified, the choice architecture and regulatory design tools of these applications and devices 'nudge' and prompt users to make certain 'health' choices (such as lower calorie consumption), and to undertake certain health behaviours (such as exercising or running further). Purpura et al. (2011) argue that the functions of these applications must be recognised as powerful regulatory tools, arguably coercing users to undertake certain actions, which cannot be individually tailored to each user, and in turn may inflict damaging physical pressure upon the body, as well as additional psychological pressure on the minds of the users. This was demonstrated in the research findings, as the positive feelings the participants initially associated with self-tracking and the governance of health and self-care dissipated over time, and were replaced by feelings of pressure and stress. For example, by quantifying and tracking her food and calorie intake through MyFitnessPal, over time these practices became 'obsessive' and a cause of anxiety for Sophie:

> "I was actually using My Fitness Pal app previously to track my calories and macros. From today I've decided to stop using it as it has become too obsessive. I've literally spent hours before on it lying in bed at night deciding what I am allowed to eat the next day and stressing when the macros didn't add up. I can now see feeling guilty because I was only allowed 1 apple and actually had like 2 and it's messed up my carbs and sugar intake goal for the day is ridiculous" (Sophie, Diary Entry, 31, F).

These self-tracking and self-quantification processes over extended periods of time felt over-regulatory and in turn an embodiment of self-disciplinary rules and quantifications of consumption, exercise, routine and broadly, lifestyle. These practices led to 'ridiculous' determinants of what participants were and were not allowed to do and eat, which they interpreted as impacting on their sense of self-worth, generating feelings of being a 'bad' and immoral person. Shame and guilt were attached to poor self-discipline and not sticking to self-imposed 'rules'. Furthermore, feelings of elation and control became synonymous with an adherence to self-imposed individual parameters. Although at both ends of these 'good' and 'bad' spectrums, the participants acknowledged that extreme or overwhelming feelings in relation to perceived success or moral failure as a result of self-surveillance, regulation and discipline were 'silly', self-indulgent and 'foolish', yet they still held regulatory and moral ruling over how they perceived themselves. Self-tracking devices and self-surveillant practices may provide individuals with 'information' about their bodies, but such quantification cannot extend to the human mind, instincts and intuition, or take into consideration external factors, which cannot be quantified. These computer sensors cannot factor in the unquantifiable. When one is unwell, for example, should the user respond to their application when a 'run reminder' alerts them on their device? These 'unintended' consequences or eventualities can lead to controlling behaviours through coding and algorithms, removing the inherently important role of human senses and prioritising technological sensors. Of course, the human body and mind cannot be reduced solely in this way and quantifying and tracking one's life can only provide the user with limited 'information'. What therefore becomes important within these dictating technological frames is the need to re-learn and remind ourselves to trust human instinct, as well as to ask ourselves how healthy, unwell or tired we feel. As René Leriche famously wrote in 1936 (73, 6.16-1) 'health is lived in the silence of the organs'. Disease and ill health therefore embody states of suffering, and it is the individual who distinguishes this state (disease) from normal health, viewing it as pathological, as it is he or she who is suffering from it.

6.2 (Perceived) Lack of Self-Discipline

Perceptions of poor self-discipline, a lack of self-surveillance and not maintaining 'healthy' behaviours prompted emotionally embodied embarrassment and guilt for many of the participants. Matt, a weightlifter and gymnast suffered an injury during his diary period and spoke frequently about his frustrations of 'slipping out' of 'normal routines':

> "I don't generally eat rubbish, but I found myself going to the shop and buying chocolate bars and stuff I wouldn't really eat. I don't know whether it was just boredom (…) I don't know why I did it because I don't normally" (Matt, Final Interview, 41, M).

For Matt, changing eating habits and consuming 'unhealthy' snack foods manifested itself as feelings of guilt and that he 'should' be self-disciplining regardless of his injury. Sophie identified similar feelings in regard to her consumption over the Christmas period:

> "I found myself thinking I can't believe I ate that much, you give yourself a hard time. I'm constantly obsessed" (Sophie, Diary Entry, 31, F).

Failure to 'actively' maintain 'health' encourages guilt for the individual where previously there may have been none. Morality, 'health' and body image, therefore, become inextricably linked to practices of self-tracking, associated with accumulated data, and subsequent data constructions of the self.

Gregory's (2014: 8) argument, which asserts that self-quantifying technologies may have damaging qualities, created through the "sense of guilt they engender implying defeat when users go 'over' their allotted calories and then recommending exercise to make it up", is reflected in the participants accounts here. This has an impact on how people conduct their everyday lives and intimate relationships, with others and themselves:

> "I tell you what, Friday and Saturday night I had McDonalds, and a new girl moved into the house (…) I felt mortified that she saw me eat McDonalds two nights in a row. I was obsessing over it. She thinks that's what I eat. I felt disgusting. She thinks I'm not healthy" (Sophie, Final Interview, 31, F).

For Sophie, someone seeing her eat 'junk food', even though they did not express any judgment over these food choices, leads Sophie to imagine and assume others' negative judgments of her 'bad' and unhealthy choices, which she punishes herself emotionally for. Perhaps most interestingly, the participants acknowledged that although they felt this way, they also felt they had little control over or ability to stop or 'let go' of these disciplinary, surveillant practices and their associated feelings:

> "Yeah, I always feel like I'm never doing enough (…) there is this underlying thing that I'm not good enough or that I could be doing 'better' or I could be 'better' at everything. Maybe it's that that transpires in my running or [feeling like I am] not doing enough for my health. I always take the 'oh I'm just going to rest tonight'" (Lara, Final Interview, 28, F).

The participants acknowledged the prevalence of the internal discourse, which states that they should 'always be doing more' and makes them feel like their efforts are never 'good enough' (Winnicott, 1971). As Lou explained in her final interview:

> "I always find that I have some really good weeks where running feels really easy and then some really bad weeks where you get to 3 miles and it just feels like a completely ridiculous task to carry on" (Lou, Final Interview, 29, F)

Yet, carrying on is a must and is usually enacted to seek self-validation to feel 'good enough'. As Cederstrom and Spicer (2015: 5) argue, wellness is not a choice but a "moral obligation", so too can be understood of health management. Those individuals who do not take up these technologies, therefore, may be "constructed as failing to achieve this ideal and as consequently at fault for becoming ill or contracting a disease" (Lupton, 2012b: 240). This demonstrates how many of the participants perceived their health behaviours as reflective of morality. If the participants did not 'push themselves' to start exercising again, they considered themselves to be 'having a crisis'. As Roy asserted:

> "Actually, there were a couple of weeks when I first moved here that I didn't train as much and that sort of led to a crisis where I didn't do a handstand for two weeks and I'm like 'am I just going to stop'" (Roy, Final Interview, 26, M).

Not maintaining healthy behaviours such as going to the gym, prompted the participants to question their own commitment to their regimes and to their own health, which was at points a form of personal torment. This moralisation of 'health' ensured that the participants sought validation from themselves in the context of these post-modern self-reflexive times (Giddens, 1991). In this vision, attempts at maintaining 'self-discipline' and being morally 'good' are continually at the fore, although they are not always acted upon, but is a cause of ongoing angst. Therefore, regulation through self-surveying practices in the process of self-tracking parallels "broader shifts in identity construction, [whereby] people are no longer bound to the inherited guidelines of the past, morality becomes a project to be worked out, designed and depicted in relation to others" (Hookway and Graham, 2017: No page). In this way, the moralism of health is arguably inherent in post-modern reflexive practices and is constructed through and enacted on self-tracking and social media through a performativity of 'health'.

If we follow Foucault's (1986) definitions of morality as a process of ethical self-stylisation through care of the self, the 'moral self' can be understood and related to through validation of being 'good enough' in 'health'-related practices and behaviours. In this regard, the individual moralism of 'health', is to a point, relative to what the individual subjectively decides are his or her own regulatory barriers and rules. As Matt explains:

> "Say I'm fully fit and then one day I'll skip the gym when I normally go. You get a bit of guilt there like 'oh I should've gone to the gym'" (Matt, First Interview, 41, M).

Being morally 'good enough' must fall in line with specified regulatory frameworks set by the participants, for example, exercising on certain days or eating 'healthily' six days a week. Furthermore, when this activity is reduced to tracking, graphs or numbers this does not respect the user's 'self-esteem' (Wolf, 2010). As Wolf (*ibid*: No Page) asserts: "Electronic trackers have no feelings. The objectivity of a machine can [either] seem generous or merciless, tolerant or cruel". This moralised datafication of 'health' through the measurement of such regulation, either

internally or through capture on self-tracking devices, enables subjectively determined 'legitimate' times of renounced moral 'codes' and rules; for example, 'cheat days' (eating indulgent 'unhealthy' foods) or 'rest days' (not exercising). This similarly reflects and reinforces input versus output discourses with regards to 'health' management, whereby poor 'health' practices can be overcome by enacting 'healthy' behaviours, and similarly 'healthy' behaviours can be undone by 'unhealthy' consumption or not exercising. This was reflected in Lara's diary entry:

> "[I] had a couple of quite boozy nights so was a bit worried about getting my ass back in gear with running and not being a hungover mess for the weekend and getting my focus back" (Lara, Diary Entry, 28, F).

Behaving rationally and returning to regulation according to subjectively defined rules, means renouncing the interdictions required to remove or prevent 'bad' and 'unhealthy' behaviours. Here we can identify, in the context of public health discourses and practices, a shift from a centralised disciplinary control society, towards multiple de-lineated and disciplinary societies and individuals (Rose, 1999). These fragmented and adopted practices arise through a complex embodiment of citizenship responsibilities and self-management of the body. As Ajana (2005: 3) succinctly explains: "Discipline and control are interwoven within the fabric of everyday interactions". These regulations encouraged external pressures to become internally advocated by the participants, through an individual moralism of 'health', whereby following such regulations advocated 'good' and 'healthy' behaviours, and resistance to or an active choice to disavow the 'nudges' manifested itself in individualised conceptualisations of immorality and the associated dimensions of guilt, shame and embarrassment. Each individual is made responsible for a new ethics of self-management, obliged to take responsibility for their own 'health', not just to identify and manage their susceptibilities but to optimise themselves, through diet, exercise, supplements and health knowledge. Furthermore, as Cederstrom and Spicer (2015: 49) argue guilt can be seductive and plays an important role in commanding the self "to be healthy (…) with a not so subtle underlying message: If you don't shackle yourself to a diet, carefully monitor your weight and seek to get back to some kind of imagined original state (…) then you are a morally defiled person". A desire to be 'healthy' and to prolong our lives, binds us to 'health' and to 'experts' or 'influencers', who patent new lifestyles, diets and risks, leaving every aspect of the life course vulnerable to commercial exploitation in the name of 'health' (Rose, 2007). 'Health expertise' then, works in alliance with individual ethics, and these modes of collaboration are hugely problematic because of their gross over-simplification of 'health' and the body. Furthermore, this alliance has damaging implications, which occur in the forms of over-exercise, misinformation, or damaging one's self-esteem or mental health. Therefore, through the lens of technologies of the self, individual ethics have become somatic, leading to a pervasive moralism of 'health'.

6.3 Health and Fitness Anxieties – Legitimating Inactivity

The frustration related to not being able to enact self-discipline and undertake 'improving' fitness practices and developments becomes an embodied pressure for the self-tracker and self-surveyor. Managing and mediating between long and short-term 'health' goals is a key way to legitimate not undertaking certain 'healthy' acts. In this study, inactivity or an inability to maintain 'healthy' practices for any reason, such as ill health, injury or lack of free time, frequently manifested as feelings of stress, frustration and shame. As Annie wrote in a diary entry:

> "My lack of health and fitness activities, including nutrition, has made a massive impact upon my general mood. I'm a little more agitated and feel very frustrated with it all" (Annie, Diary Entry, 28, F).

As Annie explains, regardless of the reasoning behind physical inactivity or eating 'unhealthily', feelings of agitation and frustration were still prevalent. The participants adhered to this neoliberal individualised responsibilisation discourse, they felt that they 'could always be doing more'. These feelings of inadequacy and agitation frequently developed into a heightened consciousness of the self and the body. This was reflected in Matt's words:

> "Had a while off training, and not eating great has made me feel a little self-conscious" (Matt, Diary Entry, 41, M).

As exemplified by Matt, the combination of not training as well as not eating 'healthily' leads to feeling self-conscious about one's body and health. Furthermore, as Matt expanded:

> "I try to be conscious of my food intake/calories, however, I've been slacking a little lately" (Matt, Diary Entry, 41, F).

Being 'slack' was demonstrative of poor 'health management' and not instilling self-regulation and disciplinary behaviours, leading to, in Matt's case, inactivity and the over-consumption of calories. However, when this diary entry was completed, Matt was in recovery from surgery and was under strict medical instruction not to exercise. Interestingly, all the participants acknowledged this real sense of 'beating one's self-up' over being 'slack' despite legitimate reasons for not engaging in certain behaviours. What is particularly interesting here is the question of why frustration was felt by the participants for not being able to do enough exercise (or burn enough calories) when an injury prevented it? Where does this embodiment of the pressure that advocates 'I should be doing more' come from? Truth and 'evidence' are considered to be reflected in and by these devices, through what the user is doing, what the device is capturing and what the user can then share. Yet, as Purpura et al. (2011: 6) highlight: "one postulate that underlies persuasive computing is that technology is not neutral", and it most certainly does not provide truths. Rather, it presents a carefully selected 'datafication' of events and 'health'. Therefore, self-discipline in self-tracking is a mediation between what we personally want to achieve and what the application or 'persuasive computing' might tell the participant to do *(ibid).* Lara expands on this in her final interview:

> "I think because I signed up for this race, I think there was a pressure to maintain, because I was just about up to 10km when the doctor said I shouldn't run. I was like 'I need to maintain this level because I've got this race' but then it was also like 'now I've got an excuse not to do it'" (Lara, Final Interview, 28, F).

Interestingly, for Lara, listening to her body in pain was not an excuse not to race and such a decision had to come from a medic with an official authority to 'sign off' on her injury, which legitimated not competing in the race. Regardless, Tim also highlighted, the pressure to keep training is still embodied. For Tim, for example, pushing yourself is important to maintain progression, even if this is detrimental towards physical 'health'. Yet, mentally it made him feel well and 'healthy':

> "If I'm ill or I've had an operation, I kind of accept it but then after a few days I start to get a mixture of itchy feet in general because my body is used to being active and my mind is used to being pushed in that way. And a little niggle in the background is also that if I'm ill or stop doing stuff for too long then that's going to have a negative effect in terms of my slightly obsessive want for progression" (Tim, Final Interview, 34, M).

When the participants were physically unwell or injured, they maintained self-bettering and optimising goals. These goals made them feel physically 'healthier', interestingly highlighting the importance of mental 'health' over physical 'health', or perhaps how one informs and influences the other. For Tim and all the participants this desire for progression, fitness improvement and 'optimisation' of the self, however subjectively those goals and parameters were determined, had negative implications for their mental health, sense of self-worth and personal development. Stigma was attached to invisible ill health and injury and the participants felt that they had to 'prove' such ailments when they were unseen, as a form of diagnostic pantomime (Roach, 2017), or representation in which the community's gaze is transported and pulled into the participants' (and patients') clinical space. For example, Tim had a hernia operation the month before participating in the research. He reflected within his diary and in the final interview, that though this was an operation that resulted in a physical injury and recovery period, as it was internal, it was effectively invisible and therefore it was down to him to interpret how to 'deal' with it and decide when to exercise:

> "I think there's a different way of conceptualising illness when it's physical, like a hernia rather than viral stuff. Legitimating illness and injury which is unseen. Yeah, you haven't got a bandage, you haven't got stitches. It's all internal, isn't it" (Tim, Final Interview, 34, M).

In this quote, Tim examines how his operation was physical yet internal and thus harder to prioritise in terms of resting and recovering, in the absence of the 'signs' of injury or surgery, such as stitches or bandages. This prioritisation of rest and legitimate inactivity is made even harder when you have a viral illness, rather than a physical incapacity, which relies entirely on the individual to identify the issue for themselves. As Tim articulates:

> "For me, if I'm ill for a long time or have an operation (…) that was a mixture of not being able to do stuff and then feeling very weak which is something that I'm not used to feeling. I might be feeling a bit sorry for myself and that I'm ill and weak and that I can't do it, so I probably push myself more than I should to try and change that mental state and be like 'ok I can do some stuff'. When I did that yoga session when I was really ill it made me feel really awful afterwards. I nearly threw up, I nearly passed out, but mentally I also felt good for it." (Tim, Final Interview, 34, M).

Frequently, the participants failed to prevent disciplinary activities from dictating further regulatory behaviours and often continued within these cycles of self-surveillance, regulation, development or emotional strain. Without upward comparisons exemplified by others' experiences of the positive outcomes of a particular treatment or disease, people may feel increasingly distressed (Festinger, 1954). It can therefore be asked why these participants continued with these self-imposed policing cycles of disciplinary regulation when it was detrimental to their physical and mental 'health'? In the quote above, Tim highlights frustrations related to being unable to exercise or eat 'healthily'. In particular, when it came to invisible disease, illness or internal injuries, the participants struggled to rest and let their bodies recover as they felt they would be 'losing' the physical fitness improvements they had perceivably 'gained'. Similar to Tim, most of the participants when unwell pushed themselves to undertake what they considered 'healthy' physically-tiresome activities, which frequently made them feel more ill, but which mentally appeased them, since in turn it made them feel 'productive' and able to maintain their 'healthy' lifestyle. Ironically, the contradiction was that the attempt to 'push' oneself before physically capable, frequently delayed recovery and was at times to the detriment of their physical 'health'. In this regard, doing exercise mitigates mental anxiety, which manifests itself in a lack of activity, even if it is bad for their body. A tension, therefore, lay between being 'legitimately' inactive due to rest and recovery, and an inherent and embodied ambition to fulfil the objectives of 'optimisation', whereby further self-improvement becomes the mind-focused driving and desiring goal for these participants. In this way, individuals strive to be 'healthy' regardless of any negative impacts or damage upon their physical bodies.

As a concept, legitimating inactivity similarly demonstrates these intensified self-policing and self-regulatory practices in the management of the 'healthy' self. More specifically, the participants' perspectives resonated with Crawford's (1980s) theory of 'healthism', whereby 'health' becomes the prioritised aspect over all other focuses of life(style) for the individual subject. This was prevalent even in the cases when the participants' poor physical health prevented them from prioritising exercise. They still felt frustrated and inadequate due to their inability to put 'healthy' behaviours into practice. This was especially evident in Sophie's case. Even though she had achieved her goal of running a marathon, she stated that:

> "I was gutted [I couldn't do more running] but then the only comfort I had from it was that I had just done the marathon so I felt like I had a good excuse, because everyone would be like 'oh how's your running going?', so I was like 'I've run the London marathon and my knee's bad" (Sophie, Final Interview, 31, F).

For Sophie, her injury from the marathon 'legitimated' her decision to stop training but she still felt frustrated that she could not be active. Why is it then that legitimating inactivity is a key theme for these participants'? The participants interpreted this discourse as temporarily removing responsibility, before later becoming (pro-)active and self-caring consumers of 'health' and responsible citizens of a neoliberal society. This was evident in Matt's account:

> "Spoke to a friend about my current (lack of) exercise regime. I'm frustrated as I can't do a lot at the moment. I'm always competitive with my peers. I need to minimise my sugar, and carb consumption to compensate for lack of movement" (Matt, Final Interview, 41, M).

When usual exercise routines are not possible, different behaviours and exercises are adopted to maintain calorie burning, weight loss or personal development. Here Matt also reflects the input versus output discourse and treats his body like a machine, which led to corresponding feelings of guilt for not reaching or working towards optimum fitness levels:

> "If I run 10km and whatever and then do 10,000 steps in day, it is kind of a drop in the ocean compared [to what I was doing before]" (Matt, Final Interview, 41, M).

Practices that are incomparable to previous behaviours are not identified as sufficient for progressing or even maintaining fitness levels. Rather, feelings of nostalgia towards previous 'levels' of fitness becomes the focal point of frustration for not being able to enact self-discipline and to 'improve'.

Managing and mediating between long-term and short-term 'health' goals is a key way to legitimate not undertaking acts, which may prevent recovery. As Roy wrote:

> "Deciding not to work out was definitely the better option for my long-term health. It irks me that I have to make this decision, but you're not going to get anywhere just doing the things you like" (Roy, Diary Entry, 26, M).

In this excerpt, 'doing whatever you like' does not refer to indulgence in 'treat' foods or inactivity. Rather, Roy wishes he could keep up his exercise regimes to enable a physical recovery from injury. Self-discipline therefore, in this context shifts from the regulation of activity to the regulation of rest. This regulation, seeks to ensure that activity levels are lowered, also has to be internally 'legitimated' by participants to achieve big goals. For example, Lou enjoyed her yoga class in a different way after completing the marathon:

> "Actually, now it's quite nice to take a step back and go to yoga and not be there because I should be stretching but because I want to go to yoga, going to different classes because I don't need to use that two-hour slot free going for a run" (Lou, Final Interview, 29, F).

In this sense, on completion of her training regime and the London Marathon, other exercise was enjoyed for 'exercise's sake', without a goal to improve. This again demonstrates the proliferation of self-optimising and self-improvement discourses, which surround the use of technologies of the self and their corresponding practices. Other than injury or illness, some of the other reasons that 'legitimated' inactivity for these participants included financial limitations, moving to a new house or relocating cities, which for Roy disrupted his gym attendance:

> "I want to train now but where do I go? Is there equipment that's sufficient for my needs, that brings a stress factor (…) to not train and have to figure out where to train and whether you can find somewhere to do hand-balancing or not" (Roy, Final Interview, 26, M).

Being familiar with one's gym, location and fitness community is key to maintaining health-related activities. To 'get to know' his new colleagues, Roy joined a lunch club at work to build a social and professional community. In turn, this influenced his consumption choices:

> "Generally, I just try to cook and eat things I enjoy. Right now, there's not much point in optimising this because my activity level changes day-to-day. Once I get more settled and feel the need, I will dial this back in more. I joined the "lunch club" at work, which means I eat together with other people. This has significantly altered my eating patterns to include a lot more bread, that's a definite influence" (Roy, Diary Entry, 26, M).

Building social and professional networks online and offline also impacts upon health-related decisions, as the participants frequently imitated the particular food choices of those around them. This 'influential' increase in bread (carbohydrates) was deemed by Roy to be an 'unhealthy' consumption practice. Yet, he 'legitimated' it because he wanted to 'fit in' with his colleagues by joining them where they like to eat, and to an extent imitating his food choices. For Roy, this removed the motivation to 'optimise' or adhere to self-disciplinary health practices at the time, as his recent home and job move meant that the priority was to familiarise himself with his new surroundings and colleagues. Similarly, talking to others directly often mitigated the anxiety the participants felt around not sticking to lifestyle regimes and not posting. As Annie articulated:

> "I had a chat with a few of my colleagues as they noticed the change of habits in the week. It actually made me feel a lot better as it has happened to a few of them too, and they too have gone off the rails a bit. I am only human after all. I guess it's good sometimes to remember that and other people then can relate to you too" (Annie, Diary Entry, 28, F).

The participants identified that being relaxed and 'happier' means not diligently and obsessively regulating food consumption. Therefore, for these individuals the self becomes identifiable and

related to through the self-management of its being (Foucault, 1988) and active responsible behaviours. Inactivity then, can only be 'legitimated' through certain physical (in)capabilities.

6.4 The Burden of Self-Surveillance and Self-Tracking

The final section of this chapter analyses in depth the burden of self-surveillance and self-monitoring and in particular the intensified practices of self-policing, regulation and the moralism of 'health', which the participants embodied. The existing literature on this topic associates disadvantage with personal failure (Cederstrom and Spicer, 2015; Sayar, 2004). However, I argue that using these devices and platforms further entrenches personal failure within discourses of poor self-discipline and poor 'health' self-management, particularly in the context of neoliberalism's power over the body, and to put it in new materialistic terms, the mind controls individual behaviours and responsibilities are internally practiced and maintained (Moore and Robinson, 2016). For example, Fet felt that self-tracking his cycling commute had become tiresome:

> "I guess I felt that my daily commute is stressful enough to add another thing to it. I know it was only a weekly progress, but on Mondays I knew I was going to share after my commute, I just had enough and no longer wanted to be burdened by it" (Fet, Diary Entry, 30, M).

Fet only shared his commute once a week to self-survey, track and share timing progress with his social media community. A few months after relocating, the struggles related to commuting, as well as self-tracking, felt like a burden that had outweighed its previously interpreted 'benefits' of capturing for example, elevation, time and speed. Frustrations were also felt by the participants when they could neither undertake their fitness practices nor acquire the relevant data:

> "I felt a little dissatisfied at myself for getting up slightly late today and being unable to post. I did not think about my audience/friends who may keep track of my progress, but mainly for myself as I knew the following week will be a week off work and I would have liked to gain some sort of data of my time prior to a week off, especially as I had a week off previously due to wet weather" (Fet, Diary Entry, 30, M).

This diary entry from Fet similarly demonstrates the discourse that attributes satisfaction to acquiring data-driven constructions of the self. In this discourse, sensor quantification and data acquisition become representative of 'health', more than human instincts, which does not take into consideration senses that cannot be measured (feelings, instincts, intuitions). In essence, it does not take into account the elements that sets us apart from computers, as human beings. Fet did not express frustration at not being able to cycle to work as he overslept, but rather because he could not acquire the data from his commute. Since he would be on annual leave the following week and the previous week he could not cycle due to bad weather, a desire was prompted to acquire data to ensure that there were no 'gaps' is his data capture and representation on his 'Map My Ride' application. Purpura et al. (2011: 6) consider there to be "issues around surveillance and the ascendancy of data collection over personal experience as a means for establishing truth and

manipulating behaviour". In this regard, Fet felt frustrated at not being able to track his cycle ride. Although he completed his commute, he craved the data to represent it. Therefore, self-tracking and quantification reduce human 'health' to numbers and patterns, through code mediated by computers algorithms. Statistics become a priority over human instinct and personal decisions. The self-tracking device or social media platform therefore can only represent what it does know and not what it does not. In this regard, this thesis argues that it is imperative for application, device and platform developers and consumers to realise that good health cannot be simply attributed to data (Taleb, 2012).

Many of the participants' self-tracking practices changed during the three-month reflexive diary period. It is important to remind the reader here that this thesis does not define self-tracking practices as those which can only be captured in quantitative formats. Rather, self-tracking is understood to broadly denote qualitative and quantitative digital mediations of 'health' and fitness. For example, a participant's fitness selfie or photograph of their dinner is a similar self-tracking practice to using the Strava application to track cycling or using a Fitbit wearable device to track steps or runs. This drive for individual education to self-manage 'health' is also achieved through adopting multiple devices or using many platforms, as exemplified by Sophie who was calorie counting with the 'MyFitnessPal' app and sharing her 'healthy' vegan and vegetarian dinners on Instagram. Sophie identified her balancing and engagement with multiple platforms as a contributory factor to her existing obsessive relationship with food and her health:

> "I feel it is a very positive step not using the app anymore as I feel it's contributed to my obsessiveness with food" (Sophie, Diary Entry, 31, F).

Knowing how many calories you consumed, that you slept badly or ran slowly does not provide the self-tracker with anything more than that information. This over-simplification without context dehumanises the user and turns them into to a 'good' or 'bad' number, which is restrictive in that you cannot provide context related to external lifestyle factors. This became particularly problematic when taking into consideration disease and mental health issues, especially for those who struggled with their relationship with food and those with eating disorders. Sophie's diary entry was contextualised further in her final interview:

> "So, I've made a conscious decision to write on this day when I haven't posted any pictures, more specifically food pictures as I feel like I need a break from posting as much food stuff" (Sophie, Final Interview, 31, F).

Sophie diarised on the day she decided to break from using apps and social media, as posting over time had turned her gaze further inward, which had intensified her practices of self-discipline and regulation. She interpreted this self-policing as damaging to her mental health. Upon reflection, all the participants interrogated this process and felt that self-tracking either quantitatively, through bio-metric data capture applications, or qualitatively through 'selfies' or food photography, felt regulatory and provided (though self-proclaimed) forbidding boundaries. This perspective resonated

with Purpura et al.'s (2011: 6) assertion that: "while personal goals are always culturally influenced, the key distinguishing feature (...) is that users do not get to choose their own viewpoints but are provided with one by designers". The ability of humans to intervene when it comes to the damaging effects of such devices and platforms is limited as one can only monitor or quantify within the limitations or challenges, as decided by the application itself. This is achieved by "pulling quantitative measures to the foreground over qualitative ones and usurping the normal situational human decision-making process" *(ibid:* 7). A sense of 'empowerment' and being 'free' were common discourses associated with not using these devices and not self-tracking, as demonstrated clearly in the below quote from Lara:

> "My phone [battery] died when I was running. I took out my headphones and I could hear the birds and the trees rustling and it was actually quite nice. I always thought I needed the music to keep me going and giving me a bit of a boost, but I was ok actually. I did the 10km without my phone, you don't know what time you're doing. You don't know how fast you're running. You're just doing what you can. Before, I found the Nike app really annoying, I found it a bit slow because each time I kind of knew when I was going to be getting to the 1 or 2-mile mark and it was like it doesn't know where it is, because it's slow and it kept changing it. It was also like telling me the time and the next time, and I'd been working out in my head like 'you're going slower now'. It couldn't figure out how I'd been slower or faster, and I can't feel like I can go any faster because I'm doing what I can but I'm now feeling the pressure from the app to do better (…) My phone's not got much memory so I just deleted it in the end" (Lara, Final Interview, 28, F).

As mentioned in the previous chapter ('Self-Surveillance and Self-Tracking'), the participants were irritated by technical issues, the fallibility of the apps, and the short battery life or memory of a smartphone or self-tracking device. However, this was at times interpreted as a positive by-product of using these devices, releasing the participant from the shackles of self-tracking and self-surveillance. As Lara described above, the joy of not monitoring enabled her to appreciate being in nature, hearing the birds and trees moving around her. Not relying on something to track her movement enabled her to be present in the moment without the distraction and accompaniment of a phone or device. Lara reflected that she felt she would need music on her phone and the tracking device to motivate her to keep going, but interestingly without it she simply enjoyed the process of running without external influences. Therefore, persuasive computing and the data that is produced by self-tracking applications have various functions, which could be considered coercion rather than encouragement. As Giroux (2016: xvi) asserts:

> As a mode of governance, it produces identities, subjects, and ways of life driven by a survival-of-the fittest ethic, grounded in the idea of the free, possessive individual, and committed to the right of ruling groups and institutions to exercise power removed from matters of ethics and social costs.

Using the tracking device pressured Lara to 'do better', 'be fitter' and keep going against all costs, which felt over-regulatory, so much so that she deleted the app. Notably, Lara recognised that without her phone and tracking app 'you're just doing what you can', demonstrating the proliferation of self-optimisation discourses surrounding these technologies, devices and platforms, as well as the pressure to share these quantified captures of exercise, 'health' practices and personal experience. This begs the question: do we ever do anything anymore, without considering its captured and represented counterpart? For anyone who tracks or life-logs in this way, this query extends further than health or fitness-related content and becomes centred around the continual self-representation of life(style), personal activities and behaviours. As Lupton (2013d: 11) recognises: the "mundane aspects of one's life are constantly shared with others, including those that may previously have been kept private". This is further examined from the representational perspective in the following analytical chapters (Seven and Eight) but is similarly exemplified within the self-surveillant practices in the following quotes. Although the participants self-surveyed through self-tracking, as well as their physical movements and consumption practices (food and drink intake), their motivations for doing so were at times lost within regimented self-regulatory processes. As Lou stated:

> "The training plan becomes a bit of a weird thing. I obviously wanted to run the marathon and I entered it for myself but then actually you've got this plan to follow so it becomes a bit regimented" (Lou, Final Interview, 29, F).

Lou was using 'Map My Run' to track her marathon training plan and found over many months of using this application that she actually found it quite restrictive and self-regulatory. At times it felt overwhelming and distracted her from her personal goal of marathon training. This reflects a common discourse that features throughout this research, in which the process of self-surveillance through self-tracking personal activity sometimes removed the goal of what participants were hoping to individually achieve, and thus the acquisition of data frequently became the new goal. This perspective resonates with Lupton's (2012b: 237) argument that "the body is hardly able to disappear when its functions, movements, and habits are constantly monitored, and the user of m-health technologies is made continually aware, via feedback, of these dispositions". It is the continual feedback from data acquisition that Lou identified as motivating for her training plan. However, she interpreted its use as policing, in a negative way.

> "I had a ridiculous run where I had 16 or 18 miles and actually that's always a bit soul destroying at that sort of distance because even when you've run really far you've still got really far to go, and I think the flipside of that [you think] 'are you kidding me, I've still got 10 miles to go'. I just want to lay down in this bush and stay here for a couple of hours. I think I turned it off then because I was just like 'I don't need to hear that'. I just need to know that I've done the distance and check in on myself" (Lou, Final Interview, 29, F).

In this way, the app reminding the participant of the time left to run was far from encouraging, but rather demotivating and 'soul destroying'. Therefore, the application can be seen as capable of limiting or extending human capabilities, depending upon the goals provided by the device. This form of persuasive computing encourages a scientific rationalisation of our everyday lives. Regardless of personal circumstances or external factors, it "values quantification and rationality at the cost of situational, hard-to- measure factors and sees scientific measurement as obviating personal experience" (Purpura et al., 2011: 6). This discourse argues that self-quantification reduces human activity and behaviours to numbers; to a human version of computing, which doesn't take into consideration all human senses and attributes. Being continually reminded and 'nudged' by the app of the time and distance left to go can remind the user of the challenges ahead, which may not be achieved, and in turn can cause anxiety for the user. Furthermore, the optimisation of the self-improvement cycle never ends, and holds as much weight (in terms of acknowledging personal fitness development) for the individual as the actual physical improvement. As Sophie acknowledged:

> "There was a time when I would've looked at me now and been well happy with it but now I think I look at a lot of pictures of people online and even though I know they're photo-shopped I feel like I need to look like that, I need abs like that, I need my arms to look like that" (Sophie, Final Interview, 31, F).

Self-optimisation goals and discourses never end, and in these continuing self-tracking, monitoring and community surveillance cultures, goals and comparisons may never be reached. In turn, this could damage self-esteem through feelings of failure or inadequacy, when comparing ourselves to others. As Thacker (2003: 56) describes in his theory of cultural attitudes towards the body and bio-media more broadly: "our culture wants to render the body immediate, while also multiplying our capacity to technically control the body". The immediacy of the body is enabled for Lou in the above quote, through the regulatory design 'nudges' reminding her of the distance to go. App developers would argue that these socio-technological affordances motivate the user. However, as demonstrated above, this sometimes fails, as this 'nudge' is interpreted as controlling and at times demotivating. This challenges dominant discourses around these consumer products, which stipulate that self-tracking devices support and enable 'healthier' decisions and 'healthier' bodies. As demonstrated above, the body is not a machine and cannot be technologically 'controlled', managed or 'optimised' in this way.

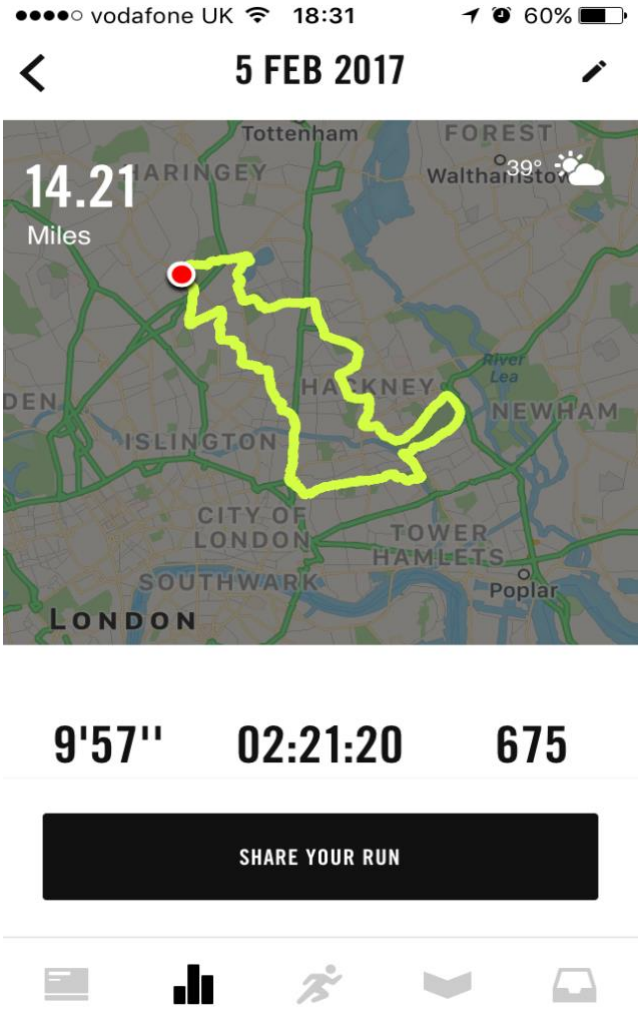

Fig. 6. Example of Participant Shared Content

6.5 Conclusion

Individuals adhere to citizenship responsibilities of good 'health' and good morality so as not to be a 'burden' to the state and society, and also to identify as 'belonging' citizens. These findings argue that good health cannot be simply attributed to data. As Taleb (2012: No Page) understands it: "asking science to explain life and vital matters is equivalent to asking a grammarian to explain poetry". There are limitations on any level of expertise, especially one which relies upon technological sensors, number quantification or representation, which cannot take into consideration many external and human factors. Self-tracking devices, apps and social media platforms can be positioned and understood by users as a technology of the self, further enabling and expanding health management capacities (Rose, 1999; Ajana, 2005), which problematically links personal lifestyle choices and health decisions to consumer-led solutions. Not everything in our body can be systematised or managed through datafication. The mind, body, health and the soul of an individual cannot be wholly reduced to data. Therefore, it must be recognised that these practices are limited in the extent to which they can enable or promote good 'health'. This problematic convergence of the body and technology through health, fitness and lifestyle tracking is

an inherent self-governing and self-regulatory practice, which deeply permeated the everyday lives of the participants, even if (in)action did not correspond to associated interpretations of pride, elation, anxiety, immorality, guilt or shame. From this it can be said that the participants' personal decision-making and thought processes, feelings and embodiments are self-governing, self-evaluative, and thus deeply self-disciplined. As this chapter has demonstrated, self-tracking is not just about the technology, but rather about what it means when people use these technologies and the physical, mental or emotional changes that occur (Butterfield, 2012). Even when technology is removed entirely or resisted in these self-surveying and self-tracking cultures, the regulation of the body, with or without the tools and technologies of the self, is still prevalent, preventative and self-policing in the mind of the user (Moore and Robinson, 2016). Whilst this chapter has explored many different aspects, practices and considerations related to self-tracking and self-surveillance, it is clear that the overarching dominant discourse, ideology and all-encompassing theme throughout is that of regulation: of the self and identity, technology, the body and the mind, and the convergence of all these aspects through various self-tracking technological devices, wearables, applications and platforms.

CHAPTER SEVEN

MOTIVATIONS TO SHARE AND COMMUNITY SURVEILLANCE

The fourth analytical chapter will explore the participants' motivations for sharing health and fitness-related content on social media (Facebook and Instagram) and the influence of community surveillance and feedback. This comes in the form of self-tracking data from applications (for example Nike+ or Strava), and devices (for example, Fitbit or Garmin Watch), gym or fitness selfies, or more general 'healthy' self-representations such as food photography. Within these sharing communities the 'self' can be monitored by others. This chapter will explore and challenge the discourses that surround community practices on social media, including considerations of voyeurism, sharing, and connectivity (Townsend, 2012), in relation to sharing health behaviours and constructions of health identity. Self-surveillance or 'imposed self-tracking' (Lupton, 2016a: 103) and 'participatory surveillance' (Albrechtslund and Lauritsen, 2008: 310) or community surveillance ensure that "users are actively engaged in surveillance themselves as watchers, but they also participate voluntarily and consciously in the role [of being] watched" (Galic et al., 2016: 29). Therefore, community surveillance usually comes in the form of participation and feedback on posts, and frequently ensures that the participants' representations of their health become collaborative, as well as comparative and competitive within these sharing cultures. Community surveillance plays an integral role in the processes of participants' own self-surveillance (comparing themselves to others), as well as how their communities online may perceive them (imagined surveillance) and their feedback on content is shared, reinforcing participants' sense of self.

Voyeurism is used as a term to define how the participants considered or imagined how their community on social media would survey their content, and thus prepared it in relation to how such content would be perceived, such as imagined judgments or feedback. Voyeurism is also used as a term to describe participants and their online community scanning and viewing social media content, without giving feedback to the sharer (in the form of likes or comments, for example). The variety of motivations for posting, and the many differences in the types of content shared, are textually and thematically analysed in consideration of the role of community surveillance and voyeurism inherent in social media practices and communities. The sense of personal achievement, accountability to the community, being a role model and expectations of regular sharing within the community are just some of the many motivations identified. The analysis in this chapter is organised in two overarching thematic sections: 'Motivations to Share' and 'Community Surveillance'.

7.1 Motivations to Share

7.1.1 Accountability to the Community

Surveillance regulated the participants' actions towards certain norms (Moore and Robinson, 2016; Vaz and Bruno, 2003). For the participants, a key motivation for sharing their health and fitness on social media was to be accountable to the community. Furthermore, this practice of being accountable to others became a common and normalised process. Accountability therefore, was conceptualised and defined as a form of self-regulation, which encouraged them to then be answerable to the wider social media community, as well as their offline networks. The participants engaged with this through conversations with peers (both online and offline), as well as through community surveillance. The action of sharing their health-related practices and behaviours over time became a normalised process of being culpable to those viewing and at times awaiting certain content. Even from their very first posts, the social media community were considered as an audience to perform for, particularly for those training towards specific goals. As Lara attested:

> "I'm going to be doing a 10km run in June so I shared something to keep me accountable for it and I got really great feedback from people (…) I think if you keep it inside, then if you don't do it, then you've only got yourself that you've let down and you can kind of ignore it, but if you tell somebody then it kind of puts it out into the world and other people are going to ask and you have to have an answer" (Lara, First Interview, 28, F).

The consideration that a community may be watching, made these participants want to document and then share their practices, exercises and goals (Ziebland and Wyke, 2012). As explored in the first three analytical chapters (Four, Five and Six), the participants' self-surveillance of their own behaviours and training was a fundamental practice in scrutinising their bodies and identifying personal, good or poor 'health'. In this Chapter, self-surveillance to motivate the meeting of set goals is enabled through curating self-representations online. As Annie wrote:

> "I do get the guilty feeling if I go 'off-track' – luckily today was not one of those days and so I felt pride in my fitness actions. Sharing my journey with people can in turn inspire me to keep going and better myself. We hit the gym hard today, we ate well, and we had fun!" (Annie, Diary Entry, 28, F).

This can be understood as participants' 'inverting the panoptic gaze' (Lupton, 2006: 236). For when 'health'-related activities are shared on social media, this inward gaze at one's own lifestyle or exercise routine, becomes a performance for the community's consumption and surveillance. As Lou explained:

> "Partly, posting is a confirmation that I'm training. I want people to check in and be aware that I'm running and call me out if I'm not. Posting runs is a way of doing that without constantly talking about running" (Lou, Diary Entry, 29, F*).*

In Lou's extract, maintaining accountability to oneself and to the community is considered a productive habit in achieving fitness goals. The participants' 'watchful vigilance', which Mann (2013: 1) conceptualises as 'sous-veillance', is extended from the individual sphere and is captured as a performative act to be viewed by the community online. Posting proves they are doing physical exercise without having to explicitly discuss it, as Lou suggested. All of the participants recognised the motivating role of accountability once content was shared, and a simultaneous accountability towards the online community, vis-à-vis oneself. Additionally, sharing self-tracking data or exercise updates provides the participants with a visual documentation and marker to keep themselves accountable to set goals. For example, Fet tracks his daily cycling commute to work:

> "I feel good that I have shared the post on Instagram (…) as a marker for myself to aim at as it is the first day back commuting after a break" (Fet, Diary Entry, 30, M).

The participants acknowledged this desire to post on social media, and to track their development after a self-proclaimed indulgent Christmas break. Sharing content post-holiday became a significant signpost for letting the social media community know that they were returning back to their routine and 'healthy' behaviours. This is demonstrated in Fet's below post:

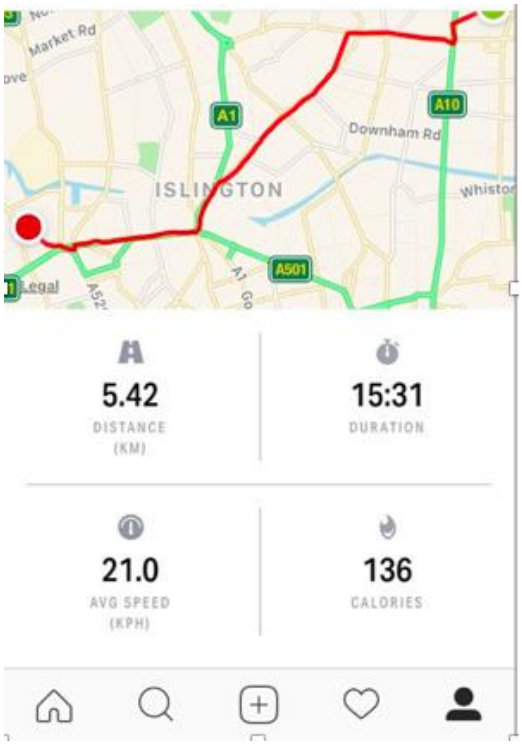

Fig. 7 & Fig. 8. Fet's tracking from 'Map My Ride' shared on Instagram

In his final interview, Fet explained that sharing his self-tracking on social media was for self-surveying purposes, and being accountable to himself, not to the community. Yet, as shown in his post above, he includes text accompanying the image screenshotted here, speaking to his social media community and arguably mitigating potential judgment from them. He does this by explaining it is his 'first ride' back after the Christmas break, alluding to the fact that any break in cycling would explain and justify his slow time. Fet also states that this is 'not bad for a chilled ride', indicating that he was not pushing himself, which contributes to a discourse that suggests: 'I can do better if I try'. The following week, Fet provides continuity to this narrative, by comparing his time to the previous status written above:

> "I posted on this day, as it is a week after my first ride back from a winter break. I wanted to see and track whether my performance has improved or worsened (…) I feel the need to follow through in trying to beat my previous post" (Fet, Diary Entry, 30, M).

Although he does not acknowledge it, by connecting these posts, Fet constructs an online narrative for his social media community. This public diarising speaks to the community through a discourse of self-betterment and improvement, presented in his terms as accountability and competition against himself, but also accountability towards an (ever-expanding) online audience. This is examined privately through reflections in his diary:

> "Before the start of the ride, I checked on my previous post and was aware of the time and speed to motivate me on this ride. With this in mind I knew where exactly on the journey to push a little bit harder to get a better result" (Fet, Diary Entry, 30, M).

Therefore, these commuting posts are used to look back over tracked times and routes, so Fet then knows which parts of his journey he needs to improve upon. Fet could of course simply use his self-tracking device, without posting to achieve this. Yet, sharing provides him with additional evidence and proof of self-improvement. This exploration of the self through data acquisition, which Kristensen and Ruckenstein (2018: 12) conceptualise as a 'laboratory of the self', entails a new awareness of lived experience, where the self is known through data, and the data simultaneously informs the self. Fet did not acknowledge that by sharing and narrating his cycling commute he did so for the community. However, consciously or not, these posts do build a narrative of continual progress through data self-representations, for the social media community. Therefore, for Fet and all of the participants, once content is shared, the voyeuristic gaze of others serves as a motivating tool.

As well as sharing their own data and health-related content, the participants also acknowledged that seeing other social media users sharing similar data and representations of being 'healthy' (such as gym or fitness photos), was also extremely motivating for them in their own practices. In a diary entry Sophie explained:

> "(On reflection) The other day I saw one of my Facebook friends had posted a run via run keeper [running app) so I wonder whether subconsciously this made me think to go for a run, so I could upload it too" (Sophie, Diary Entry, 31, F).

Seeing her friend posting about going for a run, when Sophie was not currently running as part of her own exercise routine, encouraged her to do the same. This was a common motivator for participants to adopt different or new personal fitness routines. The participants' surveying of others' posts on social media, encourages them not only to take up comparable healthy behaviours, but also ones that they can similarly capture and then share on social media to compete against others. Being accountable to the community, then, is a key motivator for the participants to share their own health and fitness on social media, and to publicly declare activity through posts, which must then be maintained. A demonstration of 'sous-veillance' (Mann, 2013: 1) the 'many' (social media community) watching the few (users who post). This similarly reflects Foucault's (2008 [1977]) identification of surveillance as a system of continual registration and inspection.

7.1.2 Self-Representation and Expected Community Surveillance

Through self-tracking practices, the relationship between health and data becomes intrinsically linked. This leads to a 'datafication of health' (Ruckenstein and Schull, 2017: 262) as data becomes the significant tangible evidence for users' self-betterment and achievements. For the participants in this study, health data regularly held more significance than personal self-gratification, for 'seeing' this produced data felt more 'factual' and 'credible' than the physical acts or exercise that produced it (Ruckenstein, 2014). Once self-tracking devices capture the data representation of the body, the feedback from the device causes the user to be continually aware of their own bodily moments, but once shared on social media, others' gaze may increase pressures upon the user to change or adapt their lifestyle for the viewing community. For example, Nigel has been regularly running at the weekend and sharing his data on Facebook:

> "I had a situation where I went for a run at the weekend and then came back and didn't post anything and somebody asked me: 'Didn't you go for a run this weekend?' So, that was interesting. I just forgot to post it" (Nigel, First Interview, 49, M)

Nigel expanded that this message came from an old acquaintance and Facebook 'Friend' via a private message on Facebook Messenger. Nigel explained that he had not seen this acquaintance for many years; he had never publicly fed back or 'liked' any of his previous running posts. This other user and 'voyeur' was privately viewing Nigel's content, but never publicly feeding back. Nigel reflected that he was now more inclined to not only ensure he kept running but also to share his data with the now known imagined community, who were privately viewing but not publicly feeding back. This supports boyd's (2014: 4) assertion that online participation becomes "entirely normal, even expected". The pressure to regularly post was acknowledged by all the participants; if you regularly share health-related data, this then becomes expected from the social media

community. Routines were then altered to enable time for certain exercise or health practices that could be tracked and shared online.

Similarly, this consciousness of observations from others within the community also encourages self-censoring or the concealment of practices, maintained by ensuring 'unhealthy' practices are not shared on social media (or at all). As Jennie highlighted:

> "You can kind of see the frequency of people's posts. If they normally post food photos and they haven't for a while then it's probably because they're eating rubbish" (Jennie, First Interview, 40, F).

Posting is expected from regular sharers and, if not performed, this can be considered as indicative of 'unhealthy' behaviours or a lack of self-tracking and health improvement. This is also interpreted as a lack of commitment from the self-tracker, as not being in line with discourses of self-regulation and discipline to achieve improvement or health optimisation. This neoliberal 'government of the soul' (Rose, 1999: 11) ensures that the judgmental discourse attached to being inactive ('lazy') encourages individuals to undertake self-surveillance practices and to prioritise self-management over health, by actively undertaking 'healthy' behaviours.

The participants also identified this expected community surveillance with a pressure to document and share their practices. The continual presence of the communities' gaze, combined with regulatory processes of monitoring personal (in)action mark this type of surveillance as a deeply embedded and persistent influence (Webb and Quennerstedt, 2010). As identified by Annie, this pressure manifested itself not just as a pressure to keep up certain fitness goals, but also as a pressure to post:

> "[I feel] guilty for not posting much and annoyed as I will be losing followers and traffic through my platforms" (Annie, Diary Entry, 28, F).

Being 'there' for your community was a feeling that all of the participants felt at some point during the research period. This guilt was attached to not just a lack of commitment to healthy goals, but also to the decision not to post. Not posting could therefore be seen as indicative of censored unhealthy behaviours, as Jennie demonstrated above, because the community expects you to post, to maintain social interaction and to keep them updated. Therefore, the networked audience becomes "a collaborator in the identity and content presented by the speaker, and the imagined audience becomes visible when it influences the information […] users choose to broadcast" (Marwick and boyd, 2010: 17). As Lou discussed in one diary entry:

> "Felt a bit like I had to share something on Instagram… even though the run wasn't all that picturesque - bit stressful to be honest thinking about needing to take a photo on the run. Gave up once I started getting tired and remembered this wasn't why I'm running!" (Lou, Diary Entry, 29, F).

All the participants viewed expected community surveillance as part and parcel of data sharing cultures, and often experienced this as a form of stress associated with their fitness or health practices: to maintain their set goals, and to document and share this regularly with their social media community, for the communities' benefit, not just their own. This 'imposed self-tracking' (Lupton, 2016b: 103) and 'participatory surveillance' (Albrechtslund and Lauritsen, 2008: 310) over time felt too invasive. Thus, we have to ask, are these pressures or motivations mentally healthy for individuals? This question is particularly pertinent when we consider that the line between motivation, pleasure and stress becomes ever more interlocked in these social media and data sharing communities.

Unwelcome participation and feedback is sometimes received from these audiences. Amy (First Interview, 27, F) was regularly posting Facebook status updates, documenting her cancer diagnosis and health journey. On one occasion, she was crowd funding for some treatments, which are not available on the British National Health Service. She received a private Facebook message from a family 'friend', asking her who she thought she was and why she was:

> "so special she deserved other people's money?" (Amy, First Interview, 27, F).

Understandably, Amy was shocked and taken aback at this negative feedback from her online community. Yet she just accepted it was someone with different views and it did not affect her future posts. This reflects Trottier's (2012) arguments related to how social media communities' interpersonal relationships have become increasingly surveillant. Such practices arguably also normalise users' acceptance of unwelcome or negative feedback. The participants interpreted this not as problem but as a condition of participation. Similarly, Annie received some unwelcome feedback in the form of inappropriate comments on her Facebook Live videos. This referred to sexually explicit comments from Facebook users, who Annie did not know:

> "I do get some, interesting comments on the morning live feed. As it's public, anyone from anywhere can log in and so I can get some inappropriate conversation. However, you must take the rough with the smooth and so I just ignore them!" (Annie, Diary Entry, 28, F).

In the final interview, Annie detailed that she was not shocked or offended by these comments. She just considered them as an expected interaction on social media. She did not feel harassed and simply blocked these users. What was perhaps most interesting about these interactions was how both Annie and Amy did not express feelings of being harassed or upset when cruel and derogatory comments were made. Both participants simply brushed these interactions off as a 'necessary evil' of sharing within social networks. In both cases, the posts were 'public', but this does that mean that any abuse should be expected and accepted. Yet, in data sharing cultures, the question can be asked as to whether users have simply accepted that foul, vulgar or sexist commentators are part and parcel of these spheres? These examples demonstrate Tufecki (2008), boyd and Hargittai

(2010) and Moore's (2017) identification of a 'trade off' occurring between managing privacy and achieving visibility in the eye's others through these technologies. In these cases, privacy is nullified to gain public exposure, and derogatory or negative feedback is not criticised, but normalised as a part of data sharing processes and cultures.

During the research period, all the participants acknowledged that being perceived as 'healthy' and 'active' by the social media community is incredibly important to their sense of self and health identity. Community members feeding back positively to participants' posts in the form of 'likes' and written affirmations made them feel proud, not only about their own practices and sharing, but also about their ability to 'inspire' others. Seeing other online friends' posts encouraged them to look forward to offline interactions and sociality. As Roy wrote:

> "It's quite habitual to use if I check it. I'm going to Berlin in April with a lot of people I follow on IG [Instagram], so every time I see a post by one of them, I look forward to it more" (Roy, Diary Entry, 26, M).

Roy is a part of a Facebook group and community of hand-balancers and weightlifters. The members of this community mostly document their progress through posting photos and videos on their Facebook group and having (offline) meets every few months. For Roy and the other participants who are members of fitness communities, seeing other community members posting certain developments encourages them to similarly want to develop their own skills. It also adds to feelings of community, communal development and personal skill. If one member is advancing well, Roy highlighted that he would particularly look forward to meeting this individual to train and develop their skills together. The connection between community and the understanding of others doing similar practices provided comfort and can be seen as a supportive tool in this motivating discourse of self-betterment. Sophie similarly reiterated this discourse:

> "It encourages me to be healthier the more I post" (Sophie, First Interview, 31, F).

In response to such community surveillance, a reflexive process ensues. The more the user self-tracks, shares and reflects on these practices with the community, the more 'healthy' they feel. The process of reflexivity is a motivating and guiding tool to maintain 'healthy' practices. Lifestyle is strategically managed through the reflexive practices of the self (Giddens, 1991). Most of the participants acknowledged community support on social media as a key motivator to share and be accountable for their fitness or health goals.

7.1.3 Craving Community Support

Motivations for sharing health and fitness-related posts on social media centre not solely around direct accountability to the community. Whilst being accountable to others was a key driver, a desire for interaction with the community extended into craving support. The participants

conceptualised community support in terms of written feedback on posts, private messages on Facebook and Instagram, 'likes' on posts, and private messages sent via text or WhatsApp, for example, in relation to their shared content. This became particularly important for the participants who felt that they were not receiving support from the people close to them in their private lives. As Lara discussed when she decided to do a marathon for the first time:

> "Maybe it's because it's not enough just me, maybe it's a confidence thing, I think. Looking outside for some reaffirmation (…) You want your immediate circle to have self-belief and everyone says how hard it is and it was like that's not very positive" (Lara, Final Interview, 28, F).

Lara felt her network (offline), and particularly those who did not have similar fitness ambitions, were not supportive of her marathon goals because they either could not relate to achieving anything comparable, or were simply uninterested. Lara held a personal drive to want to hit certain fitness targets. Yet, her self-belief was low, which led to feelings of anxiety that set goals were unachievable. Therefore, sharing this content can be considered a technique for understanding more about the self through these technologies. This reflects arguments that technologies of the self provide 'new intimacies of surveillance' (Bersen, 2015: 40) for users and viewers, enabling self-exploration and self-discovery (Kristensen and Ruckenstein, 2018; Foucault, 1988).

The participants felt a need to gain recognition outside of their (offline) social circle, especially when those peers were not encouraging of their goals. As Lara articulated:

> "Maybe that's why I shared it, to get recognition somewhere. I don't think of it like that, but I'm curious if I'd have been as sharing if he [Lara's boyfriend) was more interested or gave more encouragement" (Lara, Diary Entry, 29, F).

If acknowledgement is not received from the user's peers (offline), family or partner, sharing online is often a way to gain recognition and guidance and compensate for a lack of support. By posting about their fitness goals on social media, the participants hoped to receive community support, encouragement and even admiration, in the form of 'likes' on posts or positive written feedback. This became particularly important when participants were having challenges in other areas of their lives, such as personal relationships. As Lara expanded:

> "I think sometimes I share to feel better about other parts of what's going on. I wasn't going to share anything, but my boyfriend and I had fought the night before (…) I think in a weird way sometimes the gratification you get from social media can make you feel better about other parts [of your life]. I realise this contradicts what I said before about not relying on the affirmation from other people. It's a strange line I cross over back and forth in my mind sometimes" (Lara, Diary Entry, 28, F).

As Lara identifies here, and as many of the other participants reflected (in their diaries and interviews), their social media practices sometimes contradicted how they initially perceived their personal sharing. To be more specific, over time and through inevitable changing personal and private circumstances, sharing practices and in turn expectations of the communities' roles in their individuals lives, similarly evolved based upon individual needs. In this instance, Lara had fought with her boyfriend, did not feel he was supportive of her marathon ambition, and thus she relied upon the social media community to gain support and recognition, and to boost her low self-esteem and health anxiety surrounding the marathon being potentially unachievable for her. If we unpack this further, a number of important questions can be asked: Why do individuals need recognition from others? Why is it that our internal interpretation and recognition of and for ourselves, of health, fitness or any personal ambition is not always (or arguably ever) enough? This questioning supports Zeibland and Wyke's (2012: 233) research, in which they argue that overreliance on "virtual support can lead to wasted time browsing and posting on the web, preventing people from benefiting from social contact in their own locality". Perhaps, to answer this existential question, we can follow Foucault's (1988) thinking, and consider that through tracking our activities and engaging with social media communities, we are trying to validate our experiences and understand who we actually are. This manifested itself in the participants' craving support from an online community, which was a common desire for participants who did not know anyone who engaged in similar fitness practices to their own. For example, individuals taking part in unusual exercise or fitness regimes, such as Roy, a 'hand-balancer' (defined in his own terms as "the performance of acrobatic body shape changing movements, or stationary poses, or both, while balanced on and supported entirely by one's hands or arms", First Interview, 26, M):

> "[I am] definitely an individual looking for a community online. All my hand-balancer friends are online" (Roy, Final Interview, 26, M).

Roy did not know any 'hand-balancers' in his offline world, and so sought out a community online to make friends and track development together through social media. Sophie similarly expressed the importance of gaining support from individuals or community members who were also marathon training:

> "I mentioned to a few friends that I had been for my first proper run since the London Marathon and said how I was in a lot of knee pain after. I felt proud that I had been able to push through the pain to reach my target of 5 miles. Apart from one friend who is really into their fitness and empathised with my knee pain, no one seemed too concerned, but I understand that people who don't run /exercise regularly don't always fully understand the frustration of an injury" (Sophie, Diary Entry, 31, F).

For Sophie, the empathy she received from a running friend, who similarly understood the hindrances of an injury, added to her sense of pride on completing the run. A common theme in all the participants' accounts was that taking part in individualised exercise enabled them to seek out sociality and support through sharing their experiences with their online community on Facebook

and Instagram. Therefore, any isolation participants experienced either in their daily lives, or whilst exercising could be mediated and mitigated by sharing their practices through technology (Foer, 2013; Marche, 2012: Turkle, 2015). Particularly when suffering from ill health or injury, 'catching up' online frequently became an extension of community and sociality.

Another participant, Tim, a keen yogi and snowboarder, spent a month travelling around the Alps in March 2017, during the period in which he was keeping his reflexive diary. He regularly shared Instagram and Facebook posts about his snowboarding activities and skill development:

> "Today was the first day on the mountain of my long-awaited trip! Although I had plenty of real life stimulation from the mountains, being back on the board for the first time in a year and being with a group of my bestest friends I did still spend a reasonable amount of time on social media. I posted some pics from the day and looked at my friends' posts from the day as well" (Tim, Diary Entry, 34, M).

In this quote, Tim highlights that although he was delighted to be back in the mountains snowboarding with close friends, he still felt a desire to engage with and scan social media, post about his day and view others' shared content. This however, did contribute to his positive feelings about the day:

> "Was feeling above usually awesome today, as to be expected. Seeing the pics and responses from friends reminded me how lucky I am and to make sure I enjoyed it to the fullest" (Tim, Diary Entry, 34, M).

For Tim, and for many of the participants who posted when they felt in a positive headspace, using and sharing their lifestyle, health or fitness behaviours on social media became an extension of and contributed to feelings of sociality and community both online and offline. Interestingly, this extends earlier discourses around sharing health practices in an online sphere. As Zeibland and Wyke (2012: 233) assert: "finding out about the intimate health experiences of a new acquaintance is not a conventional route to getting to know someone in the offline world". Yet, support and feedback from others online, and sharing images of group activities and working out (or in Tim's case snowboarding with friends) contributed to the participants' perceptions of their experiences. The online dimension and representation of Tim's day added to his feelings of happiness and in turn offline experience of enjoyment, from his day of snowboarding.

Fig. 9. Tim Mountain Yoga Image

> "I posted a vid of my latest mountain adventures! I'd been making several vids and taking lots of pics and sharing them online but today I was also reaching out for some much-needed positivity and healing vibes. I'd been super rough for a few days and was feeling a little low and sorry for myself :(. I was a bit surprised at how good the messages and calls because of the post made me feel. Really lifted me mentally which in turn helped me to start feeling better physically too :)" (Tim, Diary Entry, 34, M).

Tim's diary entry reflected the above image, which he posted when he was unwell and unable to go snowboarding. Instead, he did a yoga practice. He reaches out for therapeutic support from online friends in his post, by explaining that he is too ill to go snowboarding and has chosen instead to engage in a gentle yoga practice. Once support is received, it contributes to him feeling mentally and physically 'well' or 'better'. This online support received through messages from friends on Facebook genuinely makes Tim feel happier and (mentally) healthier.

7.1.4 Sense of Achievement

The research findings identified that commitments to self-management and personal ambitions often manifested as a personal responsibility towards and control over the participants' health, which was experienced either in terms of positive feelings associated with 'healthy' actions, such as exercising and eating 'healthy' or 'clean', or in terms of negative associations with inaction or unhealthy traits, such as consuming junk food, or alcohol, or not going to the gym. These positive feelings emerged as a sense of achievement gained from personal behaviours, and from sharing these personal experiences. As Lou articulated:

> "Motivation for sharing was a sense of achievement in covering 20 miles - longest run pre-marathon. Always glad when I get to share cool photos/ semi decent photos. Running is an easy way to explore and showcase my weekend/ London. Think it acts as verification that marathon training isn't just a huge absorber of my time/no fun. Also shows this to others, or at least I think it does (…) Think running alone means I want to share these experiences with people" (Lou, Diary Entry, 29, F).

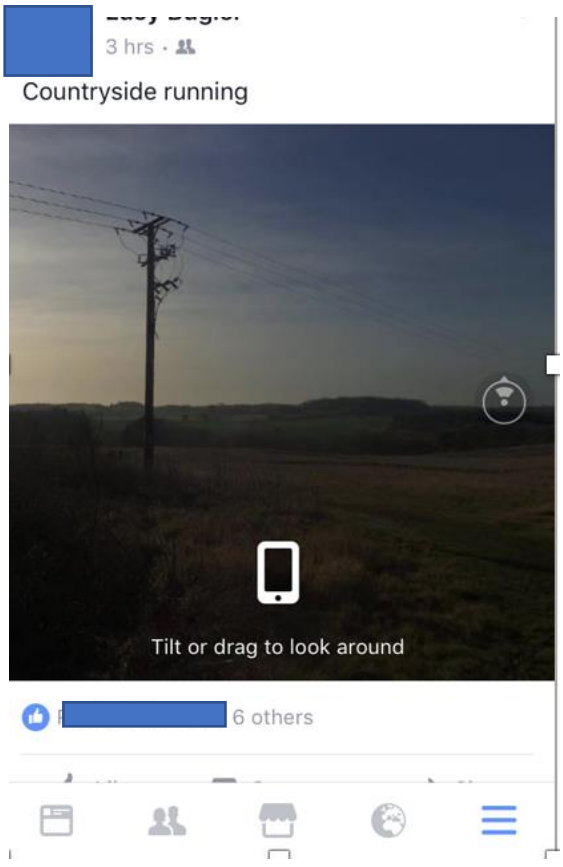

Fig. 10. Lou Countryside Running Image

When representing exercising outdoors, the participants frequently took photographs of where they ran or worked out, rather than screenshotting or sharing images of their self-tracking data. As discussed in the first analytical chapter (Chapter Four), data held more of a value in terms of health

'status' in these data sharing communities, over for example, fitness or gym selfies. When training dominated leisure time, it became important for the participants to show where they had been, through images of aesthetically pleasing landscapes, or interesting snapshots of things they had encountered en route. As Lou outlined in her diary entry corresponding with the above image, when marathon training took up much of her time outside of work, it became important to prove to her online community that training was fun, taking her to interesting places, and enabling her to enjoy her weekend by exploring beautiful locations through running. Therefore, 'showcasing' her lifestyle outside of working hours, even though it did often revolve around marathon training, was still a pleasurable and interesting experience.

A common discourse that the participants identified with was anxiety and paranoia related to being perceived as an 'obsessive health / fitness freak' by the community. This discursive construction of 'obsessive health' identities is examined in detail in the fifth and final analytical chapter (Eight). However, of interest here is that these carefully curated images demonstrated the participants' attempts to challenge stigma surrounding the identity of an 'obsessive fitness freak', solitarily bound to a treadmill in a lonely gym. Any potential isolation from running - felt, perceived and represented - is therefore mitigated through sharing those experiences, thus gaining sociality from the community and recognition from individual achievements. These data representations, therefore, shaped personal experience and activity through what the participants considered to be interesting, relevant and appropriate content to share online (Thumin, 2012). Once fitness and training has been documented in this life-stylised way, and positively received by the community in the form of likes and written affirmations, this opens the representational door for other more creative ways to portray personal progress and achievements. This is demonstrated by another of Lou's photographs (included below), which captures an empty pathway lined by brown leaves, against a grey sky, captioned by a play on the lyrics to the famous 'Californian Dreamin' song by *The Mamas and the Papa's.*

> "Motivation for sharing - lyrics stuck in my head on the run as it was grey and a bit grim outside. Some likes of photo - which was a positive" (Lou, Diary Entry, 29, F).

Fig. 11. Lou Woodland Running Image

Gratified by the likes received from her online community, Lou explained in her final interview that this photo was born from a desire to want to document her training in different ways. This identity management through specific signs (scenic landscapes) of identification (Jakala and Berki, 2004) enables a representation of more than the identity of a solitary runner and demonstrates Lou's love of music and the outdoors. In this regard, this performative representation (Goffman, 1959) of her curated identity as an 'explorer' on social media, provided Lou temporary relief from or a sense of 'overcoming' her feelings of loneliness or monotony (when training), and subsequently the fear that her social media community may also perceive her in this way. Many of the participants were similarly concerned about being perceived as alone. Therefore, these representations of 'healthy' living and 'interesting' lifestyles were curated in an attempt to challenge or mitigate potential judgment and represent not only healthy lifestyles but an aura of a positive personal attitude towards life, through the enactment of positive lifestyle traits.

A sense of achievement is also gained from the social media communities' recognition and acknowledgement of personal development. As Tim explained in one of his diary entries:

> "[I] Had a comment on Facebook from a friend saying, 'getting good mate!' which was nice to hear. One, because it's always nice to receive encouragement and support from your friends and peers, and two because I took it as they had noticed improvement which even though that isn't really what Yoga is about, I do train and work hard so [for my friends online] to see signs of improvement is good to hear and see" (Tim, Diary Entry, 34, M).

Encouragement from friends, online and offline, was experienced as supportive, particularly if improvements were noticed. This was perceived as additionally gratifying by the participants. Here we can begin to identify the relationship between feeling a sense of achievement from doing certain fitness and 'healthy' practices, and gaining acknowledgement online by the users' communities, which is interpreted as gratifying. When the participants felt their audience recognised an

improvement, this then additionally contributed to their personal sense of achievement. The participants therefore, shared their own sense of achievement for the gaze of their community and their participatory audience.

7.1.5 Sharing to Motivate and Support Others

During the research period, all the participants acknowledged that being perceived as 'healthy' and 'active' by their social media communities was incredibly important to their own sense of self and health identity. Community members feeding back positively to the participants' posts in the form of 'likes' and written affirmations made them feel positive about their own practices and sharing, and also made them want to 'inspire' others. As Sophie wrote:

> "I shared my run on Facebook and Instagram, including an image of the route. My friend who follows me on Instagram commented 'Inspiration'. This made me feel good. It's important that people see my fitness activity as positive and I want to be perceived as fit and strong. To be inspiring is a positive thing" (Sophie, Diary Entry, 31, F).

The participants felt a sense of pride in documenting their practices, to motivate the community, especially when the community perceived them as 'inspiring'. Similarly, Tim, a keen snowboarder and yogi, posted about his daily gym exercises and yoga practice. Prior to starting his yoga practice, Tim had held gendered stereotypes about yoga, viewing it as a 'feminine' activity. As a self-proclaimed 'active' and 'explorative' person, these stigmas had prevented him from doing yoga. Once he started, he enjoyed the practice so much that he began to habitually document his daily 'yoga journey' on Facebook and Instagram:

> "My friends with me at the time know my passion/obsession (…) This is part of why I post so much and am happy to carry it out in public places. It's something that I gain so much from, physically and mentally, and I love sharing/encouraging others to try it to see if they too can benefit from it (several have and do benefit from it which makes me feel happy to have been able to suggest it) I get an especially good feeling when someone who wouldn't have ever thought of yoga as an option, because they thought it's for girls or not a manly thing to do, express an interest. This is going to be one of my main missions/target audiences when I qualify as a yoga teacher!" (Tim, Diary Entry, 34, M).

Interestingly, the participants outlined that the users who became inspired by their sharing did not always want to adopt similar behaviours, but simply by watching their posts contributed positively to their day. As explained by Annie:

> "I live-stream in the morning on Facebook- I put on music, have a little dance and get ready while talking to the viewers in an attempt to motivate them and start the day on a positive note. This makes me feel good, I generally get great feedback – often thanking me for cheering up the morning" (Annie, Diary Entry, 28, F).

Annie refers to her social media community as 'viewers', although she does not use Facebook for 'professional' purposes or gain an income from posting on the platform. Yet, she feels a desire to speak to her viewers and boost their mood on what she describes as:

> "'Motivation Monday' - to help people find their true values and apply them to their lives. Maybe to even provoke a paradigm shift into following their dreams and true purpose. I don't get many viewers on my page as I don't get enough traffic through it yet, but I felt proud I was able to spare 10 mins to give back. The feedback was a few likes/ loves – will hopefully increase over time" (Annie, Diary Entry, 28, F).

This self-identified 'paradigm shift' Annie spoke of in her diary was further examined in her final interview; Annie was diagnosed with a brain tumour in her mid-twenties and went through life-threatening surgery to have it removed. She now suffers regular periods of what she describes as 'health anxiety' and feels she wants to inspire others who struggle with any mental or physical health difficulties. This 'paradigm shift' describes a move towards letting go of any previous trauma or pain in her life and focusing on positivity and rebuilding the self physically and emotionally through a healthy lifestyle: eating well, exercising and focusing on mental wellbeing, often in the form of positive daily mantras. Given her traumatic experience, and having survived surgery, she explained that she has now shifted into this more positive 'paradigm' and wants to impart that ideology to others. Amy similarly acknowledged that her motivation to share was to provide a positive representation of overcoming serious health issues and dealing with personal suffering:

> **"**The feedback I received was overwhelming and all positive. I was very touched and felt extremely loved and supported by all the kind comments. People had said how much my blog had inspired them and how impressed they were with the way I was handling my situation. It made me feel reassured in everything I had written about and like I was on the right path" (Amy, Diary Entry, 27, F).

Both Annie and Amy regularly discussed wanting to 'give back' to their community: to guide, support and inspire because of their own experiences. In this sense, representations of 'healthy' living were perceived by some participants as an ideological 'gift' of inspiration, resonating with discourses of 'data philanthropy' (Ajana, 2017). Data philanthropy is defined as "the increasing push for personal data sharing (…) [with] the very notion of privacy itself (…) coming under threat in the way it is being implicitly cast as the opposite of 'public good', as an outdated notion that should be sacrificed for the sake of collective benefit and the ideal of solidarity" *(ibid:* 2). What is of particular significance here is that Ajana *(ibid)* examines 'data philanthropy' from the perspective of the corporations who develop self-tracking applications; as a discursive configuration of their use and potential 'positive' health effects on society, generated through the solidarity of sharing personal data on a large scale. As my research findings show, this discourse proliferates, through its endorsement by not only the corporations who promote it, but also from users themselves. Like

Annie, Amy too used her Facebook and Instagram posts as a positive online resource that could support others within the community:

> "My motivations for sharing were again to express myself, to help others and to keep loved ones posted of my progress through this time. It made me feel very accomplished to share my positive experience, and when I was writing it was like a flood gate opening. I felt alive and inspired, lighting up with enthusiasm to share my experiences" (Amy, Diary Entry, 27, F).

The participants hoped that by sharing 'health' discoveries, particularly positive reflections, they could enlighten others, reinforcing data philanthropic ideals of 'collective benefit' and 'societal solidarity' (Ajana, 2017: 2), where concerns over privacy and data mining were not at the fore of their apprehensions. This resonates with Haggerty and Ericson's (2012 [2000]: 238) argument, that "in an era in which personal information may be effectively sold, privacy is now something that may be traded for services or commodities, and perhaps has lost some of its value". Similar to the other participants, these emotively-charged posts, tailored for the communities' gaze, in an effort to support others, can be understood as forms of data philanthropy, which are generated via new forms of autobiographical and public diarising, and data representations.

Through this process of personal storytelling of traumatic health and illness experiences in the form of public diarising, the participants began identifying as role models for their online communities. Therefore, self-expression without concern for their own privacy was framed as a means of inspiring others through being a 'role model' of good 'health'. This perspective reflects Allen's (2007) argument that there appears to be an acceptance of privacy loss online as it becomes more difficult to obtain, and so with time privacy may "come to matter less or differently" *(ibid:* 62). For example, Annie and others subscribed to a discourse, which promoted motivating others to encourage oneself to make 'healthier' and happier lifestyle decisions. As Annie wrote:

> "It always encourages me to keep doing what I'm doing and up my game! I feel like a role model and therefore I am responsible for influencing others" (Annie, Diary Entry, 28, F).

As demonstrated by Annie's quote, being a role model for the community also means being 'responsible' for others, to provide positive support and encouragement. Many of the participants felt that over time, this responsibility became an internalised pressure. The challenge was to be a role model, yet not to instil or reinforce individual pressures that they placed on themselves, or on others within their communities. These pressures induced stress and became a concern; to ensure that other community members surveying them did not similarly become obsessive and self-policing and adopt their 'bad' self-regulatory habits. As expressed by Sophie:

> "When friends come to me and say should I eat this I say 'yeah, eat anything you want in balance, you're doing a great job'. I feel like because I know the pressure I put on myself,

> that's the thing, I would never want to contribute that to anyone else, feeling like that" (Sophie, Final Interview, 31, F).

Being a healthy role model was an ideology most of the participants embodied. Whilst they gained positive feelings from their peers, this also contrasted with feelings of internalised pressure, to behave in certain ways. This became a prominent recognition for most of the participants who adopted this identity. The participants recognised how much pressure they did in fact place upon themselves and internalised as self-regulation, which, if not enacted, generated feelings of guilt or shame. In time, such 'philanthropic' sharing of data and health-related content became fraught with burdensome pressures to continually document a 'best version' of an optimised healthy life, for the benefit of others.

7.2 Community Surveillance

7.2.1 Participatory Audiences

Demonstrating health knowledge, self-management and improvement through the sharing of personal health data and related 'healthy' content was a key way for the participants to represent their health and fitness on Facebook and Instagram. Surveying fitness and healthy lifestyle related posts contributed to the participants feeling not only part of a community of like-minded people, but also 'healthier' and more active. Even if they were not actively undertaking similar or any health or fitness-related practices due to injury, illness, or simply a break away from health 'maintenance', just viewing others doing so still contributed to their sense of being 'healthy'. As Lara articulated:

> "I think sometimes when I look at all the yoga stuff on Instagram, it's like a way of me doing it without having to actually do it if that makes any sense?!" (Lara, Diary Entry, 28, F).

Lara surveys Facebook and Instagram posts. Her particular interest is watching Yoga instructors document their practice. Through this, she feels she is in part learning through others' posts. However, at this stage of her life (she completed her reflexive diary from December 2016 to March 2017), this did not provoke her to adopt similar practices, do any yoga, follow nutritional guidance, or even exercise. Rather, she embraced their holistic ethos, and in turn embodied the yogi's feelings of development and growth. In this excerpt, Lara identifies a dominant ideology, which was also reflected in the other participants' accounts. This ideology recognises that when scanning social media, viewing others' 'healthy' or 'active' posts can to an extent, make the surveying community, and in this case the participants, feel 'healthy' or less 'unhealthy'. This further reflects theories of the 'parochial village' (Keen, 2015: No Page), which suggest that through enabling users to refine and personalise some of the information they choose to receive on social media, as well as the algorithmic sorting the platform decides, users will rarely be exposed to any ideas that challenge their own (Brabazon, 2015; Negroponte, 1995). From a utopian perspective, social media users share health and fitness-related posts as a community of like-minded health orientated individuals. Reflecting Anderson's (1983) theory of the 'imagined community', even when nothing was being

personally achieved or shared, and in turn no feedback or connections were being made, the participants still felt in their minds part of a 'healthy' community. This positively contributed to their sense of self and identity as informed, educated and optimising 'healthy' beings.

Comparatively a dystopian perspective was also identified in that the circulation of such images and health content reinforced entrenched misunderstandings and misinformation surrounding 'health'. The participants' confidence was shaken when learning how others deal with similar situations, if they got the impression that their own ways of coping were less than 'optimal', provoking and reflecting discourses of the 'worried well' and anxiety in those who are 'healthy' (Husain and Spence, 2015: 2). Online accounts of users' anxieties and negative experiences could contribute to gloom and apprehension about what might happen if such 'health' is not maintained or improved. Interestingly, many of the participants identified how seeing other users' posts, which document 'unhealthy' lifestyles, such as consuming junk food or alcohol, can also encourage a strong personal incentive not to imitate similar behaviours. As Annie wrote in her diary:

> "Instagram is a massive help in helping me avoid rubbish food. Watching other people eat rubbish also puts me off and as I'm working in an office, that of course is inevitable" (Annie, Diary Entry, 28, F).

Viewing others' lifestyles through content shared online (Instagram) and similar practices offline (colleague lunches), helped stimulate and inspire participants' 'healthy' choices and actions. Alternatively, when other users' developments were shared, and none were being personally achieved, this contributed to feelings of inadequacy and failure. On further discussion in the final interviews, Sophie highlighted how it is rare that these feelings of inadequacy manifest in action. Rather, it can become a cycle of inaction, whereby one watches others posting about their 'healthy' lifestyles and feels inadequate because of what one is *not* doing. This sets up personal comparisons, as well as personal parameters for distinguishing between being 'healthy' and being 'unhealthy'. As expressed by Sophie in her final Interview:

> "My friend at work commented that when she looks at some of these pages (not mine!), it makes her feel bad about herself because she wants to try and be healthy and then she sees all this stuff and it makes her feel bad that she isn't doing that" (Sophie, Final Interview, 31, F).

Seeing others posting their 'active' behaviours can be motivating for the surveying community, but this also makes users who are inactive, or unable to make healthier decisions, feel guilty. This polarisation of ideas and knowledge works both ways and could also encourage upwards comparisons for users viewing the shared content (Festinger, 1954), and in turn judge their own practices as unhealthy, or not healthy 'enough' (Cederstrom and Spicer, 2015). In addition, people who deal with things in other ways (e.g. those who have different values or have made different decisions) may question their own perspective or develop a sense of shame or stigma around their own decision-making processes. This makes viewers of this content compare their own behaviours (or lack thereof) to those of others, which manifests as feelings of judgment and shame for the

participants. Reflecting Davies (2015) arguments that neoliberal standards of judgement advocate competitive behaviour. In this case, this internalisation of the competition with themselves and others made participants' feel 'they should be doing more', and guilty for not doing 'enough'. As Lara explained:

> "I felt a bit despondent. It feels very far away from me right now. Sometimes looking at the accounts is inspiring and other times can make you feel inadequate" (Lara, Diary Entry, 28, F).

These discourses of shame became internalised and embodied by the participants, and arguably also by other users within these social media networks. In this context, we can identify how "Subjectification takes a particular form in neoliberalism, in which subjects self-define in terms of their status for the external quantified gaze" (Moore and Robinson, 2016: 2776). For the participants therefore, the guilt attached to 'unhealthy' habits becomes internalised in anticipation of negative perceptions within the social media community. Relief over successful management of health conflicts with the guilt associated with mismanagement; the "ideal consumer and bio-citizen of the digitised welfare state is expert in their own body data production, which provides them with a sense of agency about their health" (Fotopoulou and O'Riordan, 2016: 66). Therefore, within the discourse of self-surveillance and individual health management there exists a core pressure to be 'active' and perform 'healthy' behaviours to 'optimise' health. The participants considered this a responsible process, and perceived themselves as irresponsible if it was not maintained. This was demonstrated in Osten's case:

> "You see all these people being healthy and you think that you need to be healthy as well. It's also kind of like a guilt trigger (…) You feel like you're missing out on the stage of improvement that they're getting (…) I think I could always improve my health (…) There's nobody on social media really promoting a good balanced life. It's a world of extremes it seems" (Osten, First Interview, 30, M).

Osten's quote demonstrates the discourses surrounding the ineffective implementation of self-surveillance, and the moral implications and internalised pressures that arise. These can be critically assimilated to practices of self-policing - an intensified practice of self and peer-surveillance, which impacts directly upon the individual's daily practices and behaviours. This individualised, internalised, self-policing discourse advocates that all individuals must maintain healthy behaviours through a continual cycle of self-management, knowledge building and self-care. These habitual practices of self-care situate individuals as 'active' consumers of 'health' (Tritter 2009: 381; Moore and Robinson, 2016). Within such 'active' self-representational performativity, processes of consumption, and surveillance of others online, health becomes collaborative through these participatory, competitive and comparative communities. Therefore, not only does online health identity become a collaborative process within data sharing and social media networks, but (imagined) community surveillance and feedback (if any), directly impacts upon physical and mental

health, and enacted self-care. Self-care therefore can be understood most prominently as prioritising (over other aspects of life) physical and mental health, through representing 'healthy' eating, exercise, and gratitude mantras to provide just a few examples.

As examined in detail in the previous analytical chapters, morality, health and body image become, therefore, inextricably linked to practices of self-tracking and the data-driven constructions of the self. Such feelings of shame or guilt for not engaging in certain health or fitness practices became particularly prevalent when participants were unable to go to the gym for example, because of illness or injury. Matt (41, M) regularly practices gymnastics and weightlifting at the gym, and regularly posts updates on his progress on both Facebook and Instagram. Whilst he was completing his reflexive diary, he suffered an injury, which prevented him from working or going to the gym for a month. He felt huge frustration related to seeing others' fitness development online, which he reflected on in his final interview:

> "Obviously in the community they're all posting what they've done and then I can't really post anything because I haven't done anything. I suppose at a push I could've put that I've walked 10,000 steps or whatever but it's not the same. It's not what I normally do" (Matt, Final Interview, 41, M).

In this quote, Matt identifies that posting for the community, is motivated by what is relative in terms of personal progress or skill level, but also what is relative to the online network's communal skill level. In Matt's case, walking 10,000 steps is incomparable to what others are achieving in the gym and posting about online. Therefore, it is unnecessary for him to post his activity. As he explained:

> "When I couldn't post, I was kind of out of the loop. People were posting what they'd done today, 300 kettle bar swings (…). I've sat at home and ate two snickers and a packet of crisps" (Matt, Final Interview, 41, M).

If the participants were unable to undertake their 'normal' gym routines, even because of legitimate reasons such as (in Matt's case) injury, feelings of guilt are still prevalent as they could not contribute to the online community. Not posting, also led to feelings of being 'out of the loop' and 'outside' of the community. Not only do individuals feel bad for lack of personal activity or development in the gym, but also because of a lack of sociality within their online community, since they cannot post, and in turn cannot contribute to and be 'involved' in the communities' social media representations of 'health' and fitness. Furthermore, the participants cannot contribute to and maintain their social status and reputation online (Marwick and boyd, 2010; Moore, 2017).

7.2.2 Likes as 'Currency'

Perceiving the online community as an audience, who participated through feedback on posts was a key motivator for the participants to track and share their health and fitness practices. Speaking to, for and with the audience ensured that discussion and recognition of health improvement and

fitness development became collaborative through the participation of sharers and their communities. This personal gratification and participation is quantified through feedback. On Facebook and Instagram, this comes in the form of 'likes' and written support for posts. As Lou explained:

> "Likes on photo were motivational. Motivation on sharing this run - it was really hard work today. Expected as I was tired, but it was also very grey and cold, and I got lost. Was in pain and exhausted so this was the first time that the likes have been a bit of a motivational boost - like a social media pat on the back of sorts" (Lou, Diary Entry, 29, F).

Through receiving 'likes', social media provides participants with a virtual 'pat on the back', motivating further 'healthy' behaviours. In turn, the acquisition of 'likes' form a currency related to social and health status, and reputation management. As van Dijck (2013a: 202) identifies: "liking' has turned into a provoked automated gesture that yields precious information about people's desires and predilections". As identified in the earlier sections, it became very important for the participants to be seen as fit and appearing 'healthy' in the eyes of their communities, as demonstrated here by Tim:

> "The comments from my friends definitely encouraged me to do this more often as I appeared to look healthy to them and in myself I felt awesome too" (Tim, Diary Entry, 34, M).

Having a reputation as a 'healthy' and fit person offers a quantifiable status through audience or community surveillance and feedback in the form of 'likes'. The online community and network becomes a "quantifiable metric for social status (…) The ability to attract and command attention becomes a status symbol" (Marwick and boyd, 2010: 12). The supportive aspect and recognition that people are observing your activity and 'liking' certain behaviours contributes to a wider sense of self and belonging within one's community of interest. This ensures that the sharer knows the community deems them 'fit'. In turn, they embody this health identity and thus their 'healthy' reputation management remains intact. The final analytical chapter (Eight) in this thesis will examine in more detail this construction of an idealised healthy online self. For this chapter, however, the role of 'likes' is the most noteworthy issue. The participants spoke frequently about the amount of time spent curating posts to ensure 'enough' likes were received. However, a recurrent theme was that the number of 'likes' received reduced the participants' paranoia of being perceived in the 'wrong' way. Such bad perceptions were identified as 'over-sharing', being narcissistic, or being an 'obsessive health freak'. However, oversharing was deemed worse than not sharing 'healthy' behaviours, for fear of being judged and perceived negatively by the community. Identifying how many 'likes' is 'enough', was individually determined by the participants, crucially in line with their own sense of self-esteem, whilst simultaneously being compared to previous posts. If the participants were feeling 'strong' and 'confident', fewer 'likes' were needed to dissipate their perceptions of over-sharing anxieties. In turn, if the participants felt 'low' and 'weak' more

'likes' helped boost their self-esteem through the acquisition of feedback. Interestingly, self-esteem was viewed as a mental state, which corresponded with a perceived physical state of strength and fitness. For example, low self-esteem was often expressed by feeling 'weak', and vice versa. Meanwhile, high self-esteem meant that participants felt physically fit and strong. This highlights the relation of the mind-body continuum in regard to how the participants perceived their health; mental strength corresponded to feeling physically capable. The cartesian mind-body dualism is illustrated here, whereby, the mind is perceived to be in control of the body and physical performance (Moore and Robinson, 2016). Furthermore, mental fragility contributed to feelings of doubt, whereby physical exercise goals often felt unachievable. As demonstrated in Lara's case, she felt physically unfit and demotivated, and posted about overcoming these barriers and managing to go for a run. She documented this by sharing a running selfie on Facebook, which she felt extremely anxious about sharing as she felt it was unattractive:

> "I didn't expect the amount of likes for my horrid running selfie, or such kind words, on Facebook. I nearly didn't post it there, but I'm glad I did now as it gave me a little boost and made me feel less shy or unable to post things in the future. I'm really conscious of overdoing it on FB 'cos I get annoyed with other people that do" (Lara, Diary Entry, 28, F).

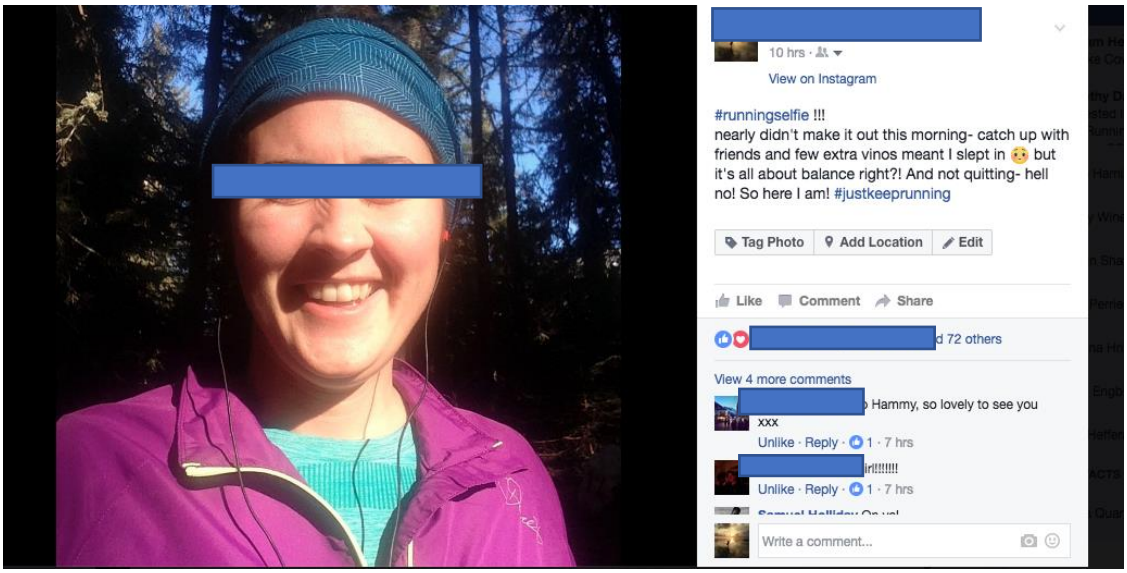

Fig. 12. Lara Running Selfie (Facebook)

In her final interview, on further examination of why she posted this when doing so made her feel so self-conscious, Lara explained that her reasoning was to break down expectations of 'perfect' fitness selfies that dominate social media. Lara wanted to reject and not conform to the dominant discourses and normalisations of representations of the body as a site of excellence (Gill and Scharff, 2011). She felt this image was more 'authentic' than the carefully sculpted, 'perfect' and sexualised images usually dominating Instagram (Elias and Gill, 2016), as she was slightly red in the face (because of the run) and squinting in the sunlight. In the caption, she also refers to the struggle to go out and run because she had a late-night drinking wine with friends, alluding to a hangover and highlighting the reality and ongoing balance of managing work, social life and exercise.

Most of the posts by participants were carefully constructed in the conformist and objectified way; slim, fit bodies, styled food, or beautiful locations become the key signifiers for representing healthy digital selves, and healthy lifestyles. This carefully edited and stylised curation was a timely and labour-intensive process, ironically as an attempt to appear 'in the moment'. These premeditated representations will be further examined in the final analytical chapter (Eight), with regards to the role these images play within data sharing cultures of participatory audiences. However, these images become worth the time spent curating when enough 'likes' or positive feedback is received from the community in question. As identified in Sophie's diary entry:

> "Today I posted a picture on Instagram of me at the gym after my boxing session. My motivation being to share progress of my 12-week challenge and how my muscle definition was coming along. Looking at the photo I feel proud of my progress so far and a big part of my motivation of sharing is to get feedback from people and I guess re-affirm to myself that I'm doing well. (…) One follower who commented 'foxy' is a personal trainer who has amazing arms so that made me feel good about myself (…) I've had a decent amount of likes of the image so far and all the time I spent editing and getting my gym friends to take a million pics for me to choose from was worth it!" (Sophie, Diary Entry, 31, F).

'Enough' responses from the community can dissipate the sharer's anxiety. If enough 'likes' or positive responses are achieved, however subjectively that is interpreted, the potential for the voyeuristic gaze of the online community further encourages the sharer's 'narcissism'. As Roy asserted:

> "I'd be surprised, if I didn't get any responses" (Roy, First Interview, 26, M).

The participants felt gratified through the positive feedback they gained from the community, which in turn fed into their sense of 'health self' and identity. As Jennie outlined:

> "The likes, that's your currency" (Jennie, First Interview, 40, F).

The currency of quantifying 'liking', as with the currency of self-tracking data acquisition, and self-representational tools, provided the participants with a sense of personal accomplishment. Reflecting Moore and Robinson's (2016: 2778) argument that "capitalism seeks to rationalise the process of cultural production through expanded quantification". Acquiring more 'likes' meant increasing regular posting, regardless of the amount of labour time spent. More posting made the participants feel healthier, as this became representative of their 'health self', even if idealised. Interestingly, if this was not achieved once content was shared, technology was often blamed. As Sophie quipped:

> "If I only got one like on a picture I'd be like 'is something not working?', I know it's really shallow" (Sophie, First Interview, 31, F).

'Likes' are expected to be received from regular sharers. As Forlano (2013: 6) examines: "non-human artefacts are understood to be participants in socio-technical systems in which they carry out specific 'programs of action' in collaboration with humans". These social media socio-technological affordances of 'likes' entwined participant behaviours within these systems and technologies of the self, whereby gratification often relied on algorithmic sorting, working in the participants' favour to gain 'likes':

> "I managed to hit my target of 9 minutes, really chuffed to be able to post that. If I'm honest I think that post didn't get as many 'likes' as I wanted on Facebook. I was like, 'I didn't understand, I was like 'maybe Facebook isn't working', 3 people liked it. 'When I was doing my marathon training, I was getting loads more likes (…) sometimes you're like, 'I've just ran, like it'" (Sophie, Final Interview, 31, F).

If these representations of 'health' and reaching training goals were not positively received by the social media community in the form of 'likes', technology was blamed for not algorithmically prioritising a post and deep frustrations were felt in relation to the community for not recognising one's achievement. These annoyances also served as a reminder of the affordances and algorithmic influence of social media platforms (Thumin, 2012). In this way, the platform and its socio-technical elements was not serving the participants in the way that they themselves served the platform and voluntarily shared data. Therefore, when the participants recognised that these power relations were not reciprocal, they attempted tactical self-tracking and tactical sharing. As Fet documented:

> "I posted on this day because I haven't done so in a while and it's Valentine's day. I know a lot of people will be using Instagram today" (Fet, Diary Entry, 30, M).

Here, Fet explained that posting on Valentine's Day was a tactical move due to his assumption that many people would be sharing or 'showing off' photographs of their gifts on Instagram, or indeed that the voyeurs would be privately surveying his content, on this day. His hope was that with more people using the platform to post or scan content, even if this was likely centred around Valentine's Day, and therefore unrelated to 'health', he still posted his cycling commute with the goal of gaining visibility. Although Fet did not have any data evidence, he perceived that there would be an increase in the number of users who in turn would see and hopefully 'like' his content. Unfortunately for Fet, his tactical tracking and sharing did not reap such rewards.

Only one out of twelve participants said they were not motivated by 'likes' at the beginning of the research period. Fet continuously felt assured that sharing data from his cycling commute was self-tracking for his own self-surveillance. At the end of the research period, through completing diary

reflections, Fet's perspectives shifted. In his final interview, he examined this progress and identified that gaining 'likes' impacted him a great deal:

> "A lot of people are addicted to sharing, just like I used to post loads of things on Facebook (…) the more likes I got, the more sense of validation from other people (…) I guess with my cycling, I had probably posted for myself, but as I said I was going through this journey and I actually found myself liking the likes, (…) it certainly made me feel better that people knew that I was up at 6 in the morning doing the travel and managed to do the bike ride, people would sort of validate it, 'oh he did 5 or so km in this time, that's pretty good'" (Fet, Final Interview, 30, M).

Fet identified gratification in two ways: firstly: feeling good for receiving 'likes', and secondly using 'likes' to provide motivation. As Fet expressed, he 'liked the likes'. They did indeed provide him with personal motivation to keep up his cycling commute, as well as motivation to track and share it. This difference between 'liking likes' and needing 'likes' to motivate cycling was also examined in Lara's diary:

> "I guess it depends on what mood you're in or what other interaction you have that day. I haven't posted anything in a few days, I'm still getting a few notifications from the posts though, likes and comments. It is a little boost, but I find it more curious too- are these genuine remarks or people trying to boost their own profile? I've been using social media but haven't really been actively taking part, apart from a few likes which isn't real interaction in my book. I'm craving seeing people more" (Lara, Diary Entry, 28, F).

Lara felt she did not need to post anything new as the 'likes' she was receiving from an earlier post were 'keeping her going'. Issues of trust and authenticity also came up when individuals were examining the role of 'likes' in their tracking and sharing practices: the participants often questioned if likes were genuine or not. The impossibility in determining authenticity behind a 'like' (Marwick and boyd, 2010) became a core reasoning behind the participants considering them empty and void of emotional and social value. Further to this, written support on posts, private messages, telephone and face-to-face conversations were unsurprisingly deemed more authentic, genuine, and valuable. As Fet wrote:

> "It's nice to touch base with them, with something more tangible than just a like" (Fet, Diary Entry, 30, M).

The tangibility of particularly face-to-face contact with one's social circle or community, was a key driver in the participants' detoxing from their digital world, either by 'cutting down', or quitting and deleting social media permanently. This will be further examined in the final analytical chapter (Eight). Lou similarly felt that 'likes' only had so much traction; after time and when other stresses

in life such as work became dominating, 'likes' did not seem to hold as much value as when someone had time to track, share and survey:

> "Up to a point with training you need a bit of encouragement and you need a bit of almost normal people who aren't running a marathon telling you that what you're doing is impressive and then you're like 'ah yeah, it is, thanks.' After a while you're just like 'actually, I've got to finish this sodding marathon'" (Lou, Final Interview, 29, F).

For participants' training towards specific goals, feedback from the community in the form of 'likes' held only limited value and motivation. Though participants associated their online community with a sense of sociality and support, they felt that something was missing, notably a genuine validation of their achievements by peers who shared other interests, who may have eased the burden of a surveillant gaze. In sum, the currency of 'likes' offers only a one-dimensional transaction.

7.2.3 Community Surveillance and Sociality

Sharing health and fitness-related content on Facebook and Instagram was overall considered conducive to sociality, supporting previous literature that considered social media practices to be centred around sharing knowledge and enabling connectivity (Townsend, 2013). Sharing, surveying and participating in lifestyle-related posts on Facebook and Instagram contributed to the participants feeling part of a community. Overall though, Facebook was considered more 'social', and Instagram more conducive to self-representation. These online communities do not always centre around like-mindedness, or shared 'health' and fitness goals, but often simply provide a sense of sociality and connection with others. For example, on New Year's Day, Tim shared a photo of a handstand in his yoga practice, including his Christmas tree in the background with an accompanying text stating he was 'jumping into the new year'. In his diary, he continued, by explaining the following:

> "Still felt hungover! Hehe! I felt happy to have shared my excitement at the new year beginning and as often with my posts hoped it may bring some good vibes to anyone not feeling quite so positive about things at that time" (Tim, Diary Entry, 34, M).

Fig. 13. Tim New Year Handstand Post

Through documenting and sharing this particular pose on this date, Tim both metaphorically and physically demonstrated his positive mental and physical health, excitement and enthusiasm about the year ahead. Tim was keen to represent a rounded and authentic self, still exercising despite documenting his hangover from overconsumption of alcohol from the night before. This construction of authenticity represents both an idealised and demonised health identity, which comprises both the 'good' and 'bad', 'healthy' and 'unhealthy' self. Tim was perhaps comfortable representing himself in this way because his peers and online networks would similarly be celebrating New Year's Eve, consuming alcohol and/or indulging in eating 'unhealthy' festive foods. Thus, arguably his perception of potential judgement of unhealthy behaviours (drinking alcohol), was mitigated by others online and offline, who were doing the same. Tim saw that his community was similarly sharing and representing their celebrations through Facebook and Instagram online. Furthermore, this update of his New Year's Eve celebrations and positive mental outlook acted as a representational tool to connect with his community by lifting others' spirits and prompting interaction through social media. In his final interview, Tim explained that in the hours and days following his posting of this photo, he received many comments and 'likes' from friends all over the world, updating him about their lives and discussing their celebratory activities, thus feeding his

sense of community and sociality with friends near and far. The question remains, however, from this and previous examples: are these attempts at sociality through sharing content on Facebook or Instagram an attempt to overcome isolation in an individualised world? Lou examines these feelings of isolation and explains that:

> "When you run with someone, you're like 'someone was with me there, so I don't need to tell anyone' which is quite weird, a little bit of the self-indulgence around social media I think" (Lou, Final Interview, 29, F).

Sharing, therefore, is important when engaging in solitary exercise, which creates a desire to prove you're doing something. This desire to log, document and share is not felt on the same level with group activities, as the experience has been 'shared' in the moment with other people. As Lou articulated:

> "I think on reflection it was part of that like almost social proofing of my life and initially just making sure that there was something engaging coming from me that other people could enjoy or engage in a little bit (…) I did almost see myself conforming to the 'here's what I did over the weekend, look how great my life is' mentality, and then after a while I was like 'that's not why you're doing this stuff'" (Lou, Final interview, 29, F).

Lou described the process of sharing for the purpose of communication and sociality as a form of 'social proofing'. Therefore, in line with Wajcman's (2014) work, she sought to demonstrate to her community that her life was interesting, full, busy and social through social media posting, which enabled discussion prompts with friends and colleagues in her day-to-day life.

Although used for different social purposes, Roy used his social media sharing to update online friends of his upcoming relocation:

> "The video isn't particularly striking and it's a pretty run-of-the-mill update, but it's also sort of saying goodbye, which makes me a little sad" (Roy, Diary Entry, 26, M).

Whilst Roy's hand balancing friends had a Facebook group, they also met regularly at a local gym. Therefore, when he moved to a different city to start a new job, Roy shared a Facebook post as a way to say goodbye to those he had not managed to say farewell to in person at the gym. In his final interview, Roy was questioned in relation to his reasoning for saying goodbye to friends through posting a Facebook video:

> "That's actually a really weird motivation to post something, like 'I'm gonna say bye now but I'm not going to say bye to the people - I'm going to post something online.' It felt very natural, a marking point in your life where you're moving somewhere else. Literally before that I spent every Thursday evening training with those people in that particular location,

so it was maybe a way of making a real end to it. The same way someone might bring cake on their last day" (Roy, Final Interview, 26, M).

Roy likens his post to etiquettes of leaving a job and bringing in treats for colleagues on someone's last day. Having spent regular time with his hand balancing community members both at the gym and 'online' through sharing posts, he felt it necessary to say goodbye both in person and online. It 'felt natural' to do so; a normalised process to update others on personal life events both face-to-face and online, satisfying and maintaining social interactions in both spheres. Roy reflected on these hybrid social spheres post-move and expanded:

"After I moved here I didn't post for four weeks. Then I kind of thought I should post so people know I'm not dead. I mean I don't really have a following, like a fan-base or anything. People that follow me are my friends, so for them it's like 'I still exist, everything is fine, you don't need to worry about me'" (Roy, Final Interview, 26, M).

Therefore, a 'proper' update for friends is felt only to be achieved once a post is shared online. This does not always have to be 'health' or lifestyle-related, but any posting demonstrates the proliferation of the sharing discourse, whereby regular sharers feel as though they must maintain online self-representation: 'I post, therefore I am'. Although many of the participants acknowledged these practices as trivial, they still followed these sharing etiquettes, motivated by pressures to be present on their chosen platform, signifying that posting meant 'existing'. Matt similarly recognised the prevalence of 'existing' online contributing to his feelings of 'being' in the community, especially after suffering an injury which meant he could not visit the gym:

"Yeah it just goes hand in hand with it. It's always happened ever since I started there. I've been an integral part of that boot camp since probably 2012, there's four sessions a week, every session I go to we're always tagged in it. It's part and parcel of it, (…) Not being in it for eight weeks and then being back in, it was nice to be recognised again. They put my name in big letters on the picture and all the guys were commenting like 'great to see you back'" (Matt, Final Interview, 41, M).

Matt's gym has a Facebook group for their community, and once he returned after time out from his injury they tagged him in a post 'welcoming' him back into their practices and fitness group. Online representations from the community made the participants who had time out for injury or illness feel 'back involved' and once again a part of that fitness community. Therefore, these online community representations become as important as the actual fitness practices and the social, communicative workings of the community.

Unsurprisingly, when posting for social reasons, a common by-product of this was gaining exposure from networks outside of the participants' peers:

> "[I] received a few comments on Instagram from the wider community (as in not my actual friends), which to some extent is nice but half the time they'll be a company or someone after more followers, occasionally it can be someone random that just happens to like or have connected to your post, so that would make me feel good that they got something from it" (Tim, Diary Entry, 34, M).

All the participants, even with 'private' Facebook and Instagram accounts, received follow requests from 'random' individuals and businesses. Befriending other users, including strangers, based upon a mutual 'health interest', contributed to a sense of popularity. This surveillance from those not known or 'outside' of the participants' communities was considered legitimate and accepted if the networking requests or feedback felt genuine and a way of increasing social ties. How genuine social ties were determined by participants, depended on individual goals and motivations for sharing. Most were lay people posting their 'health' and fitness practices, and so in this regard new followers were 'accepted' only if they could be related to through similar content shared. Businesses perceived as 'ethical', such as those promoting fair trade, free range, and non-GMO related products for example, were almost universally accepted into the participants' online fold. For those participants wanting to build a public social media 'profile', any 'follow' or 'friend' requests were accepted in the hope these would be returned by the other sharer or corporation, reflecting business ideologies of building networks perceived as mutually beneficial. 'Liking' users' posts and gaining 'followers' and 'friend' requests is how these vested relationships are enacted on Facebook and Instagram. Whether this popularity was virtually represented or internally embraced, this contributed to some sense of a supportive environment and dissolved feelings of isolation through befriending other users.

A less consumer capitalist motivation for connecting on social media was Fet's use of sharing to fill time:

> "I just thought it was a good idea - new place, new city, new commute - and the point was after the commute I had time to share cycling because I was on a train so I had time to fiddle around with it and share it and basically it was just another way to fill my time" (Fet, Final Interview, 30, M).

Fet also relocated during the reflexive diary period and had a new work commute. The solitary commuting time then became filled by constructing his posts and representing his cycling commute to gain a sense of social connection on social media whilst alone on the train. Participants who were marathon training, cycling for commuting purposes, doing home yoga practices or preparing meals for one, engaged in solitary and individualised health and fitness practices, and experienced little interaction with others. As Matt discussed in his final interview:

> "The stuff I generally post on my own thing is only the stuff I do, but then obviously I get tagged in other things by other groups that I'm in (…) I kind of post it in the fitness groups

that I'm in, just showing people different sorts of workouts they can do" (Matt, Final Interview, 41, M).

When engaging in these practices in isolation, without a community around them, the participants acknowledged that sharing enabled sociality by extending the solitary self to a community, to gain interaction. The inverted panoptic gaze can be adopted by anyone 'connected' with the community, ensuring the workings of the body, and constructions of the 'self', can be shared within multiple public online spheres (Lupton, 2012b)

7.2.4 Competition and Comparison in Community Surveillance

Surveillance of other users' social media accounts and sharing online affected the participants' own health practices (Zeibland and Wyke, 2012). This voyeurism was identified as a common community practice on social media and was employed as a competitive and comparative tool. For all the participants, achieving certain goals either individually or competitively within the community was considered 'good enough' to be shared because it demonstrated individual improvement. For sharers, this voyeurism was also identified as a community practice enabling competition and comparisons with other users. Using self-tracking and social media platforms can provide a dual function: users self-track, quantify and record their health practices, and they can also observe and compare themselves with others, which in turn motivates and informs their health choices. As demonstrated by Sophie:

> "The app would tell me afterwards if you'd set a record, so you could share that on social media. There'd often be challenges as well, and you could see what your friends were doing with leader boards" (Sophie, First Interview, 31, F).

Social media, therefore, through their algorithmically organised sociality channels, ensure personal meritocracy is disciplined through achievement ranking. As discussed earlier in the chapter, this is accomplished through the quantification of feedback or 'likes' on social media and as well as through community leadership boards on self-tracking apps. We can liken this competition to gaining recognition or positive feedback online within scoring systems of measurement, which encapsulate a 'feedback economy' and a metrification of status (Marwick and boyd, 2010). Furthermore, in Ajana's (2013: 21) terms, we can see this as the 're-mediation of measurement', whereby status becomes quantifiable through data statistics. For instance, Lara was running a 10km run in Chamonix, which included a huge elevation of running up and down a mountain. Other friends of hers were doing the same route with varying distances of up to 80km:

> "I was noting other people that weekend that had done the marathon. It was really motivating to watch them. They were all posting their times, but I didn't post my time because, what I shared, it was honest but there were bits that were missing, I didn't want to admit how long it took me. I was proud of the fact that I'd done it, but I didn't want anyone else to judge how long it took me. About comparing, the 10km was the lowest race

> you could do. The day before there had been an 80km race, and it's not just 80kms, it's fricking up and down the mountain as well. It was proper effort, but it felt like proper effort for me as well, but I felt like it wasn't the same" (Lara, Final Interview, 28, F).

In many of the participants' cases, sharing some content deemed 'personal' or 'transparent' caused embarrassment, when considering the gaze of the community. Censorship therefore, was actively managed, either wholly or partially, based upon perceived negative judgment. Self-surveillance through peer surveillance became an individualised pressure for users. This in turn encouraged a detachment from the community. Although Lara felt proud of her achievements, she did not feel that her success was comparable to others' doing the same route but running a longer distance. These findings identify that privacy therefore, is relative (Allen, 2008), prioritised and enacted with the awareness of imagined peer surveillance, over concerns of wider community surveillance. By viewing other (tracked) marathon runs on social media, Lara felt her time was not 'good enough' to be shared and so tailored her post to show that she had completed the route whilst concealing her time. Ajana (2013: 7) argues that "(…) when the body is viewed beyond its somatic and material contours, what ensues is a problematisation of the very distinction between materiality and immateriality, and, with it, the distinction between the 'material' body and the body as information". Therefore, when the body is viewed as a data representation, in this case statistics (route, time and distance) captured on a self-tracking app for a competitive running event, and then shared on Facebook, it removes individual context for those competing. As Ajana *(ibid)* identifies, the 'material body' is removed from its context. In this comparative framework the same route is being run by all the community. Yet, there are multiple races each differing in distance. Lara identified that if their de-contextualised data ('body as information') was shared online, it would be incomparable (and thus embarrassing) to those running longer routes. Omitting her time (versus distance) statistics ensured Lara could evade any potential judgment from the community, with regards to her 'slow' time.

By comparing their achievements to others, the participants frequently felt that developments or goals were never 'enough'. As Lou wrote:

> "[I] did then get a bit unnerved seeing other people also training, who had run further (…). This was the first time that I had been worried by using social media and comparing myself to others" (Lou, Diary Entry, 29, F).

These social media pressures centre around visibility of oneself through simultaneous surveillance of others, which reinforces self-betterment discourses that you can always do and achieve more. The status attached to times versus distance, deemed reputable enough to 'share', ensures that any developments or times that do not fall into reputable categories are not shared online. These shared tracked runs become a visual competitive driver, to encourage further modifications to health behaviours, creating a spreadsheet-like relationship with the body, which is marked against others within the community (Gregory, 2014).

Sharing reputable times or achievements is not always driven by wanting congratulatory feedback from the online community. Whilst this is positively received, it becomes particularly important to receive credit from others at a comparable level of fitness or goals. This perspective was demonstrated in Lou's account:

> "Mentioned to a friend who is also training for the London Marathon that I'd been for a run. Having a close friend who is also training helps with motivation in a competitive way" (Lou, Diary Entry, 28, F).

These supportive interactions from other (experienced or first-time) marathon runners, ensures competition is healthy and motivating;

> "I need the reassurance from those who are doing it, not from a community who aren't doing it" (Lou, Final Interview, 29, F).

Context is important when sharing these exercise and fitness developments. It is important to gain support from others working at similar physical levels. Roy echoed these views:

> "I can talk to my mum [and explain] that my handstand is poor, and my forearms are fat and I'm slacking but realistically she has no idea" (Roy, Final Interview, 26, M).

Reassurance from 'others' doing similar training is often viewed as more gratifying. This ensures their support and feedback is deemed more valuable than from other community members who are not working towards the same goals. Competition and comparison are meaningless "unless there is not only some sense of equivalence amongst those deemed to be competitors, but also some outlet for contingent differences to be represented" (Davies, 2015: 57). (Friendly) comparison from those within the 'parochial village' online (Keen, 2015: No Page) was appreciated by many of the participants.

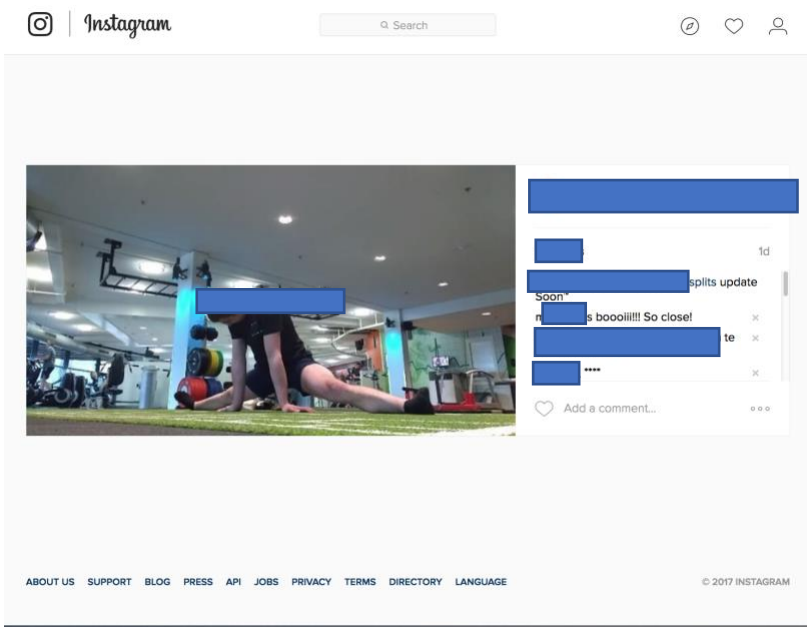

Fig. 14. Roy Middle Splits

Reaching certain goals or personal bests, especially competitively with others within the online community who have not reached those goals yet, was automatically shared on social media. This competition, arguably presents the individual who has reached these fitness goals as more advanced and 'improved' compared to others. As Goodyear et al. (2017: 8), identified: "peer comparison therefore, functioned as an important part of ongoing surveillance and regulation of actions". Reflecting on his above post, which discusses his middle split distance, Roy wrote:

> "I shared a video of my current middle split depth on Instagram. Middle splits came up during chats a couple times, so I decided to put one on Instagram. It's one of those things that a lot of people have been working on, but nobody got yet" (Roy, Diary Entry, 26, M).

Participants who were reaching personal targets or personal bests (PB), considered reputable enough to share, often became the object of admiration, being seen as representative of an ideal fitness standard by others within the community. During his final interview, when asked how this made him feel, Roy expanded:

> "There certainly is a bit of a showing-off or competition element in sharing middle split progress (…) like look at me I'm so far ahead (Roy, Final Interview, 26, M).

'Showing off' was not considered a negative presentation of self if in relation to something that others, or very few within the online community had not yet achieved (especially as middle splits had been discussed offline in the community). Reaching these goals mitigated the self-aggrandising post, and often any anxiety about how it would be perceived:

> "Yeah nobody had achieved a full flat middle split. It's sort of a competition" (Roy, Final Interview, 26, M).

Roy explained that this balance between oversharing and 'showing off' was also determined by the levels of sharing from other individuals in the community. For example, those who share do not see it as showing off, as opposed to those who do not share. Interestingly, this was not always in relation to the same fitness regimes, but simply came down to whether that user shared anything on social media at all. The participants also explained that when it came to deciding if something was 'oversharing' and thus concealed, or 'showing off' (in a good way) and thus shared (if in relation to a specific practice, training or PB), they were not overly concerned about the perceptions of the wider community. Anxiety over being perceived in the right way only centred around those who did similar practices (other yogis, weightlifters, runners etc.). A fascinating motivation to share came from Roy, when he explained how he posted to make others jealous, which he believed then motivated them:

> "Well I definitely post that to make people jealous. It's not a mean kind of thing, but there is that competition element (…) it's about making people jealous to motivate them" (Roy, Final Interview, 26, M).

In this way, Roy perceived his showing off in a positive way, to make other community members envious of his achievements and to encourage them to want to reach the same goals as him, thus reflecting Goodyear et al.'s (2017: 8) words: "friendly competition thus constitutes surveillance through pleasurable regulation". Roy was not concerned that this may make others resentful of his self-aggrandisement. Rather, his attitude was that if it encouraged them to get fitter or work harder towards their goals, it was a positive outcome, which was more important than any negative perceptions of him. When asked if any negative feedback was proclaimed publicly on his posts, he explained that this had never happened as yet, so was not concerned about it. However, Annie felt that any health and fitness-related posts were always motivated by self-promotion:

> "Generally, it's quite a selfish thing. Even if it's saying that it's helping others, you get all these fitness public figures that are saying they are doing it to help others but then actually I think it's to do with themselves" (Annie, Final Interview, 28, F).

Many of the participants shared Annie's perspective, in that self-aggrandisement on social media was always driven by a motive to show off, gain admiration and attention. Ironically though, in the attempt to strive for the admiration of their social media community through posting achievements, participants felt that this would be perceived derogatively and considered 'over-sharing', and/or 'showing off'.

As well as the judgment of posts, this competition between social media members can operate as a tool for comparable as well as unintended surveillance. For example, Lou was marathon training and her posts were being monitored by a friend's boyfriend through her friend's Instagram account, as discussed in her final interview:

> "It was quite funny, a friend of mine; her boyfriend was also training and basically he was using my Instagram posts through her to work out if he was on track or not. I'd constantly get 'oh Kev was asking how far you'd run this week. I showed him your post. It was 18 miles'. I was worried that someone else is using me as a guide, I'm like 'stick to your own plan, I don't know what I'm doing, I'm just following a different plan' (…) I think I had one week where I dropped down to a 10 mile run, and she said 'he's asked why, he looks really worried'. I was like 'no, no, no. My plan just had a slightly lower distance this week to then build up next week. I think it's just to give your body a break,' and she was like now 'he thinks his plan is wrong' and I was like 'no, tell him not to stress. Tell him I was being lazy'" (Lou, Final Interview, 29, F).

In this instance, intriguingly, the individual who was also marathon training was using his girlfriend's Instagram account (a close friend of Lou's), to view and track Lou's posts. This was not purely for the purpose of surveillance, but to use Lou's training schedule and progress as a guide for his own development. As Lou described when she tapered her runs, her friend's boyfriend was worried his training plan was 'wrong' as he considered Lou a demonstration of expertise. In turn, Lou felt she had to legitimate her shorter run, describing it as 'lazy' to her friend, so her boyfriend did not feel anxious that his training plan was incorrect or that he was incompetent. This interaction demonstrates how once the participants' posts were shared on social media, surveillance from others extended further than their online community, but into their online communities' social network, both online and offline. In this instance, Lou's friend's boyfriend, who did not 'follow' Lou on Instagram, surveyed her posts through his girlfriend's account. Surveillance, therefore, through these posts is indeterminable, and not bounded within online networks or the individuals we choose to 'follow' or 'friend' us.

The participants acknowledged that knowing individuals within and outside of their online community were using their posts as a guide and tool for their own training practices, became a real pressure. Being aware of this, the participants then felt they had to undertake certain practices and to document them for the no known extended community's gaze. As Lou identified:

> " It did become a self-perpetuating thing of like actually now do I need to do that so he feels that he's on track or because of that lower week, I'm a few miles behind every week. Is that going to make him feel better? That sort of became a bit too much (…). Just do what you're doing" (Lou, Final Interview, 29, F).

Once she knew her friend's boyfriend was using her as a training guide, Lou felt compelled to keep tracking and sharing her runs for his benefit, to ensure he could track himself against her. Lou also ensured she included context in her posts to let others know where she was in her training plan. For example, in the below screenshot she details that after a 20mile run she will now be 'tapering' to give her body a break, before the marathon in a few weeks' time.

Fig. 15. Lou 'Tapering' Canal Run

Simultaneously, this level of accountability to these now known and imagined communities was no longer simply a motivator for Lou, but a pressure to be the guide and motivator for others watching. Therefore, for fear of negative community comparison and competition, participants adopted more extreme or intense exercise behaviours (Goodyear et al., 2017: 8). In turn, she personalised her posts to provide context for her personalised targets, with the hope that the community would similarly personalise their own training plans. In turn, Lou tried to distance her sense of responsibility towards the viewing community by individualising her posts. These pressures, when prolonged over months of marathon training, felt distracting; not only did she find it hard to simply focus on her own training plan and personal goals, but her concern was that she now knew the community would similarly be finding her posts both motivating as well as distracting. The participants expanded that being used as a training guide, or role model (as identified throughout the research findings), made it challenging to focus on themselves, as they were consistently concerned with how others were perceiving them. Perhaps this is the eternal paradox of sharing 'health' and fitness-related content (or any content arguably), on social media.

Gratification is felt when positive feedback is received from the community, which motivates further 'healthy' practices and sharing, but over time, being the object of others' gaze, comes with pressures, which in turn can distract the user from personal goals and personal gratification. These findings chime with Ruckenstein and Pantzar's (2017: 410) analysis, which identifies how through "feedback loops, people are approached as computer-like information processors, or "auto-correlating servomechanisms," a living part of a dataistic apparatus that allows the reflection and regulation of specific movements and behaviour". These surveillant assemblages similarly evolve into competitive and comparative practices, which regularly operate in a challenging and

derogative way through public insults from others. The presentation of data and exercise are used directly as a competitive tool against others within the online community. However, amidst attempts to undermine other self-trackers within these social networks, negative feedback from and fierce competition with other users were at times interpreted as being a source of advice and support, for which one should not feel apologetic or sensitive. As Roy attested:

> "I'm very unapologetic when I'm criticising someone" (Roy, First Interview, 26, M).

Roy expanded that within the community he saw someone giving the wrong advice to another weight lifter and felt frustrated as he self-proclaimed that he was a better teacher:

> "His girlfriend is an excellent lifter but has never really taught anything. I on the other hand have been tutoring/teaching/helping people learn for almost 8 years. This is a pretty common theme in the fitness world, where people assume just that because someone is successful, it means they can teach (…) but it's not a qualification in and of itself (…) it frustrates me that his basics are probably going to be off, because he's starting off on the wrong foot, with a level of complexity unconducive to learning" (Roy, Diary Entry, 26, M).

Roy highlights an interesting contradiction here, with regards to demonstrating expertise through sharing online, in that it does not necessarily translate into having any related qualification. Who has the qualifications to call themselves an expert online? Here the murky division of roles between lay person, expert, professional, teacher, nutritionist, medic and even doctor become blurred, through the use of self-tracking apps and social media. The ambiguity of these devices, which act as both medical and consumer monitors, even though their validity has not been scientifically proven, combined with the context collapse of audiences and members on Facebook and Instagram further destabilise the idea of voices of authority (Buyx and Prainsack, 2012). Before these devices entered mainstream consumerism, medics held the professional authority and expertise of bio-metric analysis, through access to technology, training and qualifications. The question can therefore be asked as to whether a hierarchy should exist within these hybrid 'health' and wellness devices, in terms of users, roles and representations of health, fitness and the body? As Zeibland and Wyke (2012: 234) assert: "Learning through other people's experiences may sometimes prevent unnecessary consultations". Here Ziebland and Wyke *(ibid)* discuss patients sharing online, but the same surveillance and guiding practices are identifiable when participants train towards specific 'health' and fitness goals. For example, in Lou's case, she had previously run marathons, but felt concerned that other marathon runners were using her posts as a training guide, when she was not a professional runner. In contrast, Roy had taught before and felt frustrated, that when seeing others teaching with poor or incorrect instruction, it made him feel competitive within his online community with regards to:

> "who 'gets to be his teacher'" (Roy, Diary Entry 26, M).

Giving 'advice' and being 'supportive', as the user interprets it, can, however, turn users against one another. Nevertheless, this does not alter the overall interactions and dynamics within the community, as users tend to continue sharing, feeding back or trolling one another. However, a lot of 'genuine' support was achieved through seemingly healthy competition. Overall though, the participants identified how 'genuine' support was experienced through one-to-one feedback. For Jennie, the online community explicitly told her she would need their support. This narrative of self-betterment, of moving from one state ('unhealthy') to another ('healthy'), was frequently presented as only achievable when receiving community support. For many sharers, self-achievement and personal gratification was reinforced through the supportive gaze of the community. Particularly for those who do not have 'offline' or 'real friends' undertaking these health transformations, the audience feedback online aids their supposed development.

7.3 Conclusion

This analytical chapter has examined the participants' many motivations for sharing, and the role of community surveillance within 'health' and fitness self-representations on social media. These 'health' and fitness-related posts become representative of a community of like-minded and health-orientated individuals, which positively and optimistically contribute to their sense of self and identity as informed, educated and continually improving 'healthy' beings. These practices were at times perceived as pleasurable, empowering, productive and normalised participatory acts of using these technologies and sharing (Albrechtslund and Lauritsen, 2008; Best, 2010; Whitson, 2013). Overall, the users felt 'healthier' or less 'unhealthy' through sharing 'health'-related data and self-representations on social media. Community surveillance, in the form of participation and feedback on posts, ensured the participants representations of their 'health' become collaborative, as well as competitive and comparative within these data sharing cultures. The representations of 'health' identities online, and 'health' behaviours offline was an interdependent process; 'health' became collaborative through supportive feedback from the community motivating the user, and through the feedback online provided in response to users' representations of their health identities. Although achieved through, for and with the help of the audience, surveillance of *and* by others influenced the participants' practices of self-presentation. The accumulative and collaborative information produced through these platforms changed their behaviours, and their understandings of their bodies, which was reinforced by the feedback received from their social media communities.

A significant theme to emerge from these findings is the continuous and perpetual paradox of sharing on social media to gain gratification for oneself, which comes in many forms (accountability, being a role model, competition etc.), as presented throughout this chapter. Although community surveillance is a key motivator for tracking and sharing 'health' on social media, over time this simultaneously comes not only with gratifying rewards, but with complications, contradictions, and pressures generated through being the object of the communities' gaze. This in turn frequently distracted the participants through their addictive and seductive entanglements, from personal goals, personal gratification and perhaps most worryingly,

personal experience. The addictive nature of social media use (surveillance and sharing) will be examined in detail in the following final analytical chapter (Eight).

CHAPTER EIGHT

SELF-REPRESENTING THE IDEALISED 'HEALTHY' SELF: SOCIAL MEDIA ETIQUETTES AND DIGITAL DETOXING

> "We are a generation of phone people, so you pick up your phone and you think 'I checked everything so why am I picking it up a minute later.' You're just so used to having your phone and checking you don't know what you're checking for sometimes. I think there's an element of, if there's a picture when you've just spent ages getting the filter right, and the hashtags, I faff, shall I put this hashtag, then you post it and sit there. I couldn't post a photo on Instagram and then just leave my phone on the side and wander downstairs, I feel like maybe people that do it, maybe I've got something missing in my life" (Sophie, Final Interview, 31, F).

Sharing content on Facebook and Instagram afforded the participants a variety of ways to represent their 'health'. These different forms of 'health' and fitness-related content came in the form of self-tracking data from applications (for example Nike+ or Strava) and devices (for example, Fitbit or Garmin Watch), gym or fitness 'selfies', or more general 'healthy' self-representations such as food photography. Although these types and modes of content differ hugely in their qualitative and quantitative capture, socio-technological affordance and representational states, they all enable participants to self-represent their health, bodies, fitness and consumption practices. Why then, should I examine such a variety and not focus on one method, device, or type of data capture in the analysis of self-representations on social media? The blurring of 'health' with lifestyle through political and cultural shifts in the last four to five decades means that lifestyle choices and behaviour (corrections) (Leichter, 1997) have become ideologically, discursively and thus culturally linked, and demonstrative of individual 'health' states. Social media and converging digital health and self-tracking technologies enable these representations of 'healthy' lifestyles. The role of social media within these practices enables the 'healthy' individual to be both curator and subject. This othering of bodies and bio-political differentiation of one type of body and citizen from another (Ajana, 2012) is a dominant discourse within the competitive and comparative strategies enabled by self-tracking devices, apps and social media platforms. Drawing on Goffman's (1959) approach to self-presentation as a performance, in consideration of how audiences influence those observers, we can understand how a performance of a 'health' identity is enabled on social media, with the medium itself shifting the parameters of self-presentation. It is this variety of self-representations, mediated and enabled through technology, therefore, which is the focus of this chapter.

This chapter examines the many different practices and self-representational tools the participants adopted to achieve the desired self-presentation and performance of 'healthy' and 'productive' bodies and selves. Therefore, this final analytical chapter is concerned with analysing the processes and practices embodied and adopted in curation of self-representational 'health' identities. The

analysis in the first half of this chapter will attend to the most common constructions and curations enabled through social media; that of the self-representation of an idealised 'healthy' person and body. Capturing and sharing health and lifestyle on social media has become an outlet and medium for autobiographical narratives, personal storytelling, life-logging, self-tracking and to an extent public diarising.

The second analytical section of this chapter focuses on the social media etiquettes the participants demonstrated. They balanced content and mediated between Facebook and Instagram to construct desired healthy identities in consideration of each platform's own socio-technological affordances and community etiquettes. This section also examines the participants shifting sharing and self-representational practices over time and specifically during the three to nine-month research period. Changing individual circumstances and the co-evolving nature of growing (up) and aging with these technologies ensured that community surveillance and self-representational practices changed over time, in line with these transformative life events. This frequently led the participants to digitally detox from self-tracking (devices) and social media platforms for a time or indeed to quit them altogether. The final section examines the participants' many motivations for doing this.

8.1 Part 1: Self-Representation and Construction of the 'Idealised Healthy Self'

8.1.1 Representing and Moulding the Body to Social Media Aesthetics

Through sharing health-related content and a variety of representations of an 'idealised' body, the participants became "subjects of both the normalising gaze of health as well as their own self-surveillance of who to become (Goodyear et al., 2017: 3). They shaped an idealised portrait of personal identity by showing off representative and idealised personality traits to peers and anonymous evaluators (van Dijck, 2013a: 208). The participants' 'healthy self' was a construction of a health identity that other users, within the social media community could perceive and connect with. Whitson and Haggerty (2008) perceive self-presentation in the context of social media as a virtual care of the self. This 'health' identity is an often-utopian idealised representation of a healthy user, which all the participants identified with:

> "You monitor it. You only show parts of you that you want to show" (Sophie, First Interview, 31, F).

All the participants acknowledged that this construction was carefully edited to show the achievements and goals met, idealised visual representations of the body, and the life-stylisation of consumption habits, which reinforced self-betterment discourses of the 'healthy' subject (Fotopoulou and O' Riordan, 2016). As examined in the second and third analytical chapters (Five and Six) whilst data (from self-tracking apps and devices) was often used to represent the body, the participants used many tools to 'share' the hidden body, but also to construct an idealised body and

'healthy being'. For example, participants planned meals around what was aesthetically pleasing on social media:

> "I do think when I'm cooking dinner, 'ooh this will be a good Instagram picture', so I can think 'what can I cook that will look good for Instagram later'. I spend so much time moving things around on the plate that by the time I get to eat it it's cold" (Sophie, First Interview, 31, F).

For the participants, food had to be tailored to what was aesthetically pleasing on social media (Kent, 2018). They were satisfied when their food looked 'stylish' (as determined within Instagram norms of what is visually pleasing), and thus they constructed it as such. For example, they ensured that colourful ingredients were carefully arranged and presented on stylish crockery. In contrast, if meals were not deemed attractive, participants felt irritated that they could not share this, particularly if time had been spent preparing their meal. Their enjoyment of the food was diminished because they could not share the image and experience with their social media community. This consideration, therefore, further dictated consumption practices, which prompted the participants to eat visually and aesthetically pleasing ('healthy') food. These processes of mediation can be analysed through McRobbie's (2009: 62–63) assertion that such "institutionally unbounded assemblage (…) [produces a] specific subject who is continually dissatisfied about their appearance [or indeed health] and thus compelled to embark on new regimes of 'self-perfectibility'". For example, in her diary, Sophie discussed how she was driven to make meals that she deemed to be 'good' enough for her multiple profiles on Instagram, so she could share them. In regards to the below image (screenshotted from one of her Instagram accounts), she explained:

> "I feel that the image reinforces me being healthy (…) The picture summed up my goals in terms of the type of food I want to be eating and image I like to portray on social media. Even the detail down to the jar I used to make the breakfast and eat out of is relevant as there is definitely something satisfying about eating food that's not only good for you but also looks stylish / modern, which is really odd I guess! Because I'm posting pictures of my food it puts more pressure on me to not only eat healthy but make food that's going to look 'good' so I can post it. It did make me look like I was taking my food maybe too seriously? (…) I do faff around making my food look good before I take a picture" (Sophie, Diary Entry, 31, F).

Fig. 16. Sophie Meal (1)

Sophie's preparation, documentation and sharing of her (home-made) meals was not only a labour-intensive process but underlined both how she perceived her 'health' identity and how she wanted to represent this on social media. Time spent shopping for visually pleasing foods as well as their vehicles for presentation (attractive plates, jars and boards) was considered an important and necessary part of the representational and consumption process; from buying the food and crockery, to preparing the meals, to capturing and sharing the image on social media, to finally consuming the meal. Reflecting Cederstrom and Spicer's (2015: 7) argument that "to eat correctly is an achievement, which demonstrates your superior life-skills". Curating meals that looked attractive and enticing whilst also ensuring their nutritional 'value', contributed to the participants' own sense of self - of being healthy and productive individuals – while they also attempted to portray this to the social media community that viewed this content. These practices therefore, play directly into the hands of the corporations who design and profit from social media, as well as 'health' and wellness technologies, through the exploitation of "not only the desire to produce an appropriate type of body (with all the symbolism that adheres to it) but also the sense of self-development, mastery, expertise, and skill that dieting [as well as other health or body modifications and representations] can offer" (Heyes, 2006: 137). This 'value' is determined and thus acquired by both the representational 'health' data and the participants' sense of feeling 'healthy'. Therefore, the aesthetics of food became integral to what these individuals not only shared online, but what they put in their bodies. Not surprisingly, unattractive representations did not make the final public edit. The relationship between 'health' and lifestyle became even more entwined with these sharing cultures. This is exemplified below in Lara's post of her after-run 'treat' meal: a 'healthy' wrap from a local deli. This example demonstrates and draws attention to the links between 'healthy' identity construction and the life-stylisation of ethical consumption through self-representations on social media:

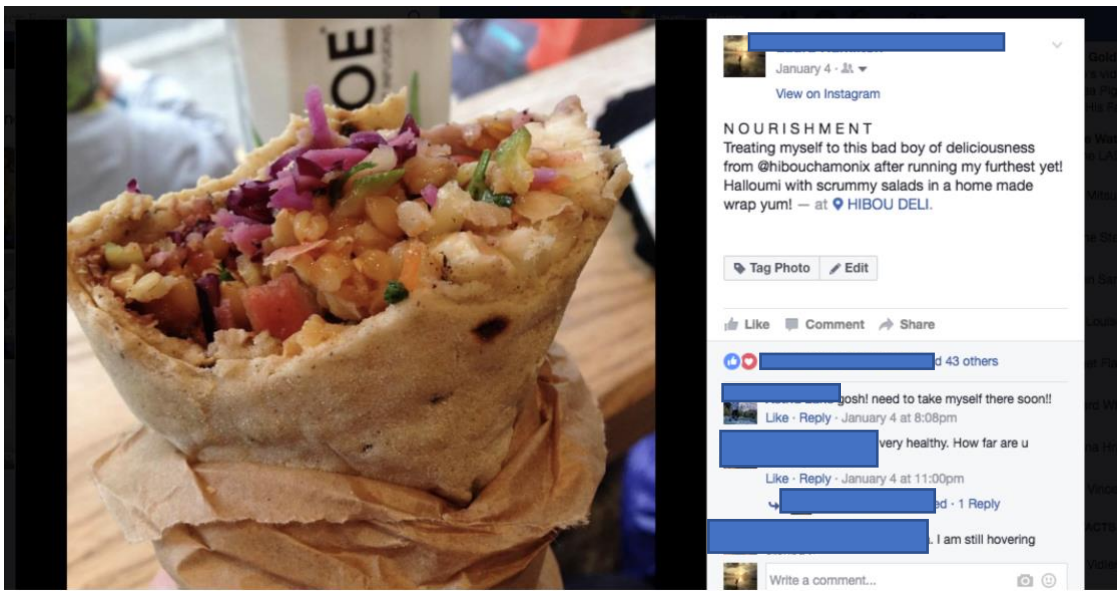

Fig. 17. Lara Meal (1)

As Lara asserted:

> "I shared a photo of my after-run treat- a wrap from a local deli - which serves super healthy fast food. I love the food there and it was part of my motivation as I was running - I was chanting the name of the deli as it was going to keep me going. I knew I was going to share a pic of it as I was running- I thought it would be a different thing to post regarding my running logs on Instagram. I also like promoting local businesses and would recommend this particular place to anyone visiting Chamonix" (Lara, Diary Entry, 28, F).

This above quote, from Lara's reflexive diary on the day she posted the image, explains how 'delicious' food became a mantra to motivate further running. As for the other participants, working out was frequently considered a goal so as to be rewarded by eating a favourite food afterwards. This motivated both exercise and 'healthy' behaviours and what the participant posted thereafter. As Lara expanded in her diary:

> "I got more likes than normal on Instagram, which is always a boost. It had the effect I wanted on Facebook as people wanted to go to 'Hibou', which I was pleased about" (Lara, Diary Entry, 28, F).

As examined in the previous analytical chapter, this quote demonstrates the discourse of 'likes' as a form of emotional currency which contributes to a personal 'boost'. The acquisition of 'likes' provides the sharer with a sense of positive self-representation and reputation management. In this case, Lara recommends somewhere 'healthy' for other local residents in Chamonix to eat, which builds her sense of self and identity as a fit, healthy, and ethically engaged individual who supports local businesses. Adams and Raisborough (2008: 1166) identify how such practices work on the premise of a "dynamic intersection of reflexivity, ethics, consumption and identity (…) of reflexive,

concerned and known consumers". In turn, sharing these types of content attempts to encourage others towards similar 'healthy' practices and ethically-driven, 'healthy' consumption practices.

Although this section has presented and examined qualitative representations of 'health' more than data from self-tracking devices for instance, habitually sharing these self-representations of health-related behaviours contributes to a form of life-logging of 'health', which we can also identify in the construction of a 'health' identity in more quantitative data. Furthermore, as Gilmore (2015: 2532) argues, quantitative data transforms personal experience and "is apt to provoke a qualitative transformation of experience predicated on the technology's social aspects. The quantified self, in other words, actually promotes a qualitative re-experience of our bodies and our social relationships". For the participants, their social relationships forged online (built from both online and offline networks) centred around representations of specific identities, in this case 'healthy' individuals. The accumulation of shared content related and necessary to perform 'healthy' identities forms a quantitative logging, categorisation and classification of the self, whereby the body is represented and moulded to conform to the desired aesthetics of social media. Therefore, within data-sharing 'health' cultures, these technologies of the self provoke the online body and the offline self to frequently meet in a troublesome dialect whereby diet and the body are tailored and sculpted to the preferred aesthetics of what is visually pleasing on social media, rather than what these individuals may personally desire (to eat, or to do).

8.1.2 'Health' Disciples

The participants captured, shared and represented health-related content simultaneously, which became both a conscious and an unconscious desire. As Jennie reflected:

> "I was like a disciple and I still am (…) It's in my psyche now" (Jennie, First Interview, 40, F).

The focus on 'healthiness' dominated the participants' everyday lives, even if they were not able to maintain 'healthy' behaviours:

> "I went through two months where I did no exercise, but it kept me in that kind of mind-set. (…) There was always a slight influence of health" (Jennie, First Interview, 40, F).

The participants genuinely identified with being healthy people due to past self-tracking and representational behaviours. Regardless of their current behaviours, the 'health self' was embodied by self-trackers (Kent, 2018: 62). For all the participants, self-tracking 'personal bests' were automatically shared. Achieving certain goals (for example, time or distances), either individually or competitively within the community, was considered 'good enough' to be shared because it demonstrated such individual improvement. This resonates with van Dijck's (2014) theories of 'dataism', which refers to a pervasive belief in objective quantification, tracking and logging of all

kinds of human behaviour and sociality through technology. For example, Sophie, whilst marathon training stated:

> "Because of sharing, you've got to get a certain time and obviously, you want to get a good time in the marathon, but you'd be stopping at a road because there's traffic. You'd be stressing out because it's going to affect your time. So, you'd be thinking you've got to run this last bit faster because of the time (…) You still knew you run well, you know that on the day there won't be traffic. But you just get obsessed with posting it" (Sophie, First Interview, 31, F).

Tracking and improving upon time and distance became a key demonstration of self-maintenance through individual regulation and self-improvement. The frustrations of the 'real' or offline world (stopping at a pedestrian crossing), affected overall statistics within the participants' set goals, and produced emotionally-embodied pressures for them. The fallibility of the apps, when data was lost or incorrectly captured, was a real concern for participants. The representation of data held a weight and significance over the participants' sense of personal gratification. At times, however, faulty devices or inaccurate data can work in the favour of these 'idealised' representations. For instance, if a faulty device captures what is determined by the user as an improved time or speed, this is considered as a positive representation, however inaccurate and false that representation may be. This reflects Ruckenstein's (2014) research on the significance of data visualisations, interpreted by research participants' as 'more 'factual', or 'credible' insights into their daily lives than their subjective experiences. This similarly reflected the cultural notion that 'seeing' makes knowledge reliable and trustworthy *(ibid),* and often reinforced their "winning and achieving at all costs" mentality (Goodyear et al., 2017: 8). This continual commitment to 'healthism' (Crawford, 1980) ensured that health priorities fed into many other areas of lifestyle, which contributed to feelings of personal achievement, self-worth and happiness. As Lupton (2006: 240) highlights:

> Individuals make choices not in a social vacuum, but in a context in which certain kinds of subjects and bodies are privileged over others (…) the responsible, self-disciplined body/self (…) who is interested in and motivated to improve their health.

For these 'health disciples', identifying as 'healthy' is the mantra for and often prioritisation above all or most other aspects of life(style) (Cederstrom and Spicer, 2015). The produced 'data double', which refers to the reductionist representation of the monitored body as data (Moore, 2017; Whitson and Haggerty, 2008: 574), could be conceived as providing the participants with more than a one-dimensional visual engagement with their bodies. Rather than simply visualising their previously tracked activities, exercises or 'healthy-behaviours', which could lead to feelings of guilt if current behaviours were not reflective of this, this self-tracked representation on their devices provided participants with a 'datafication of health' that they still embodied, related to and felt 'healthy' because of.

Fig. 18. Example of Participant Shared Content

8.1.3 Avoiding 'Obsessive' Health Self-Representation

These pervasive considerations to and continual representations of 'health' meant that over time some of the participants became concerned about being perceived online and offline as (explained in their own words) an 'obsessive health freak'. In terms of practices and behaviours, this was interpreted as an individual who only ever ate 'healthy foods' such as vegetables or salad and exercised rigorously. This included personality and identity traits associated with being a strict, self-regulatory, inflexible person, lacking in spontaneity and excitement in their life(style). Not being perceived as 'obsessive' about managing health then, was an ongoing consideration for the participants. In turn, they employed careful representational strategies to avoid this. For example, constructions of this 'healthy self' were enabled through careful inclusion and exclusion of certain health information. As Sophie stated:

> "I would post something a bit unhealthy *just* so I don't look like I'm completely obsessive" (Sophie, Final Interview, 31, F):

Fig. 19. Sophie Meal (2)

Sophie posted the above image of her 'cheat' meal on a day she was going for a run. This post was shared in an attempt to contradict or challenge any perceived 'imagined' judgment from her social media community (in this case Instagram) of obsessively eating and only posting 'health' foods. In her diary, she reflected:

> "Felt pleased that I was uploading a bit more of a wholesome looking meal as I was conscious that most of my recent posts on the page were of green veg arranged on a plate!" (Sophie, Diary Entry, 31, F).

The opportunity to post something other than vegetables on her Instagram was relished in order to diminish or avoid representations of being an 'obsessive gym bunny' and a 'health freak'. This demonstrates how imagined audiences and the community (Anderson, 1983) online are maintained through the carefully balanced mediation between self-censorship and exposure, through an "ongoing loop of impression management mixed and based upon audience feedback" (Marwick and Boyd, 2010: 13). This 'impression management' however, cannot always be maintained through content that represents specific and different 'health' identities. The participants' attempts at avoiding representations of being an 'obsessive health freak' were at times scuppered as these foods were frequently identified as not 'Instagram-worthy(sic)' or 'Instagrammable(sic)' (Sophie, 31, F). They were therefore concealed and not uploaded, as they were seen as 'unattractive'. For example, Sophie explained:

> "Last night I made Thai Red Curry and I thought 'oh, that looks a bit better' because sometimes I think it is just salad, but then sometimes I make more wholesome stuff, but it just doesn't look as pretty so then I can't post it. If I've spent ages making food and it's really tasty and then I go to take a picture and it just looked bad I'm like 'oh I can't post it after all that faffing around.' I couldn't post my breakfast this morning, it really irritated me" (Sophie, Final Interview, 31, F).

As mentioned earlier in the chapter, these practices of preparing, capturing and sharing 'health' self-representations, in particular food and meals, are labour-intensive and time-consuming processes, which convey an attempt to appear 'in the moment'. This individualistic striving for perfection is best understood as entrepreneurial self-work and, more specifically, self-capitalisation concentrated on the visual register (Conor, 2004), effected through consumer regimes of beauty (Gill, 2007b). This pre-meditated curation is only deemed 'worth it' when enough likes or positive feedback are received from the community, which can only be achieved when images are 'pretty' enough to post. Frustrations are also experienced when misrepresentations of health identity are perceived in offline settings. As Lou explained when she felt concerned about how her peers judged her eating habits:

> "I've been trying to relax my attitude towards food but it's hard when I eat around people as I feel they are judging, but I feel like I am probably to blame for posting all of the healthy pics in the first place as then I feel I need to live up to it. I bumped into a friend at the train station the other day who was ordering a bacon roll and she commented how I wouldn't approve and jokingly apologised. I know she wasn't being really serious, but it did make me think about how I come across to people" (Lou, Final Interview, 29, F).

'Living' up to the expectations of others within online and offline spheres was a concern for all the participants (as examined in detail in Chapters Five and Six). Poor body image, as perceived by others, affected how the participants perceived themselves (Cederstrom and Spicer, 2015). Therefore, online (and offline) feedback operates in a context bubble. Interestingly, these 'poor' perceptions were not just in relation to being perceived as 'unhealthy' or as suffering from an eating disorder. Rather, being 'obsessive' was defined as being over-regulatory and overtly controlling of the self, which was not regarded positively by the broader online community. For many of the participants, attempts at 'truth telling' were delivered with consideration of community norms (for example, avoiding representations of obsessive 'healthy' lifestyles by positing a 'cheat meal'), ensuring that a careful representation of an authentic 'health self' was constructed. Ironically, in pursuing the appearance of authenticity for the gaze of others, users ended up constructing an arguably inauthentic representation of self. These findings challenge the dominant discourses of 'sharing' and confessional cultures (Beer, 2010), as evidenced by social media usage. It can be clearly identified that such practices have shifted, as users age with and alongside these platforms. These findings contribute to a more critical form of engagement with such technologies, centring around questions related to the use of data (Beer, 2016), surveillance

and coercive powers (Andrejevic, 2015; Lupton, 2014b). It is worth mentioning that the very recent changes to the European Union's General Data Protection Regulation (GDPR, eugdpr.org) on May 25 this year (2018), and the recent Cambridge Analytica data mining scandal whereby up to 87 million people had their Facebook data scraped by the political consultancy (Wired.co.uk, 10/4/18), may have to an extent increased public awareness of how data, privacy and surveillance operated online before the May 2018 GDPR, as well as for the future. However, it is worth noting that awareness does not always translate to comprehensive understanding in everyday uses of these platforms from a user perspective.

8.1.4 Hash-tagging Ideologies and the commodification of the Self

Using certain hash-tags (#) on Facebook and Instagram became indicative of reinforcing certain ideologies about food, nutrition, lifestyle and what was deemed 'fit' and 'healthy' within the participants' communities. As social media, online communities and 'health' practices have "crept deeper into the texture of life, its narrative principles imitating proven conventions of storytelling, thus binding users even more tightly to the fabric that keeps it connected" (van Dijck, 2013a: 207). Therefore, it is arguably not a deskilling of interpersonal relationships that occurs online, but a conscious negotiation of what is public and private, shared or not shared. This places a greater emphasis on the language we use when presenting ourselves. Therefore, the question of what hashtags to include became an ongoing deliberation for the participants, especially when their posts varied in content and their reasons for posting changed during the three-month diary period. As Sophie reflected:

> "When I looked back (…) I was putting stuff like #cleaneating, #fitnessgoals, #goodfood, #fitfood (…) and I didn't want to be categorising food as good food and bad food, even good carbs and good fats. I just didn't want to feel like I was part of the problem that I have. I was like 'oh god.' I was a bit cringed when I looked back at my old Instagram posts, saying #fitnessgoals, #eatgood, #leanfood, #getlean, I felt like it could come across as saying indirectly 'this is what you should do'" (Sophie, Final Interview, 31, F).

In Sophie's final interview, she explained that as she suffers from an eating disorder (bulimia) she felt she was advocating certain judgmental discourses around 'good' or 'bad' foods, through the hashtags she used (which she also embodied herself). When Sophie then came to reflect upon these posts and subsequent practices in her reflexive diary she identified that it not only heightened her own anxieties around controlling her food intake in this judgmental way, but also led her to become concerned that she could potentially encourage others to do the same. Therefore, her concern was that she was promoting damaging ways of not only thinking about and perceiving certain foods, but also controlling and consuming certain foods in line with embodiments of such judgments. In a similar way to resisting the discourse and perception of being an 'obsessive health freak', the participants became concerned with providing more 'authentic' and balanced representations of a 'healthy' self:

> "I would never tell anyone what they should or shouldn't eat, and on my page I've changed how I hashtag things. I don't say like 'you should eat this.' It's more just I'm sharing food inspiration" (Sophie, Final Interview, 31, F).

Therefore, we can identify how the hashtags accompanying these images, similarly can reinforce wider disciplinary and regulatory 'clean' eating discourses. Through hash-tagging, Sophie was trying not to reinforce discourses of good versus bad foods. By making attempts to encourage mediated authenticity through her variety of healthy and 'unhealthy' food posts, she also attempted to break stigmas attached to eating 'unhealthy' indulgent foods. In doing so, Sophie arguably broke down the discourses attached to 'good' and 'bad' foods by associating a 'healthy' self with balance. As Butler (1997: 1) questions: "When we claim to be injured by language, what kind of claim do we make? We ascribe an agency to language, a power to injure and position ourselves as the object of its injurious trajectory". If we represent ourselves online through text and the visual, as opposed to through speech and body language via face-to-face interaction, our "vulnerability to language [is] a consequence of our being constituted within its terms" (*ibid*). These are articulated online mostly through language used to describe or present personality traits with differing levels of consciousness with regards to how much power certain language holds. Therefore, the message that Sophie attempted to convey was that no one eats 'clean' all the time. Rather, the 'healthy self' is about a healthy and balanced relationship with food and exercise. Although Sophie's eating disorder is still a prominent and daily struggle in her life, she wants others to take the self-disciplinary pressure off themselves through promoting a balanced and more authentic lifestyle and relationship to food, health and the body.

Hash-tagging, for many of the participants, however, was not used in an attempt for authentic representations of certain 'healthy' lifestyles but as a way of gaining self-promotion and followers through building an online profile and 'presence'. These practices enlisted participants to become entrepreneurs of themselves and human capital (Lazzarato, 2006). As this research focused on exploring lay peoples' sharing of health-related content, none of the participants were using Facebook or Instagram for commercial purposes or have a large 'following' (thousands of 'friends' on Facebook or 'followers' on Instagram). However, some did acknowledge that they wanted to 'build' their Instagram profiles through gaining more followers. In Lara's and Tim's cases this was due to a future ambition to become Yoga teachers:

> "I want to do my yoga teacher training at some point, so I'm also looking at Instagram and social media as a possible professional outlet. To be honest maybe I wouldn't post as much if I didn't have that. That might make me post once or twice a week extra (…) You need to be a regular user of it and then more people will see you and notice you, whether it's individuals, businesses or companies" (Tim, Final Interview, 34, M).

Therefore, using Instagram for professional purposes as a Yoga teacher for instance, means gaining 'clients' (Instagram 'followers' or Facebook 'Friends') through building a reputation curated online. This commodification and personal branding of the self becomes a normalised phenomenon in ordinary people's everyday lives and practices (van Dijck, 2013a) via both regular posting including specific hash-tags on related content perceived as relevant. Highlighting how new forms of visualisation and communication emerge from these self-commodifying identity formations (Ruckenstein, 2017). As Lara explains:

> "If you hashtag '#yoga' you get way more followers. One of the guys at work he's sponsored by Salomon clothing, so he's always posting. Then you're part of the sponsorship because he gets free clothes and equipment, so he's always having to put up videos of himself in the clothes; running in the mountain or skiing in the winter, said he's got a project manager. He's learnt that there's certain hashtags that gets certain followers (…) based on a 100 likes you could get six people following you back. (….) That doesn't sound enjoyable, liking stuff you don't even like (…) You can pay people to do that for you" (Lara, Final Interview, 28, F).

Such 'healthy' reputations and identities, therefore, can be created through including certain hash-tags, such as '#yoga' (for yogis) or #avocado (for food photography), and tactically 'liking' similar accounts to one's own. As demonstrated in Lara's account above, this is an extremely time-consuming and monotonous task. The branding of the self, as a 'healthy' consumer can also be achieved by tagging brands in a post and demonstrating allegiance with and promotion of a brand. As Sophie explained:

> "The other day I posted a recipe and then I tagged 'Alpro'; the yoghurt people (…) 'Alpro' liked my post and said it looked lovely, I was like 'oh, they've got 100,000 followers', and I was like 'why are you so happy about 'Alpro'', is that what my life has come to, I think I'm really special because 'Alpro' liked what I made?" (Sophie, Final Interview, 31, F).

What is fascinating about these practices of tactical hash-tagging of different words, brands and thus ideologies, is the ambiguous and intangible nature of what in fact this labour-intensive process will actually achieve. The participants held assumptions, which associated the acquisition of 'followers' or 'friends' with the building of an online 'professional' health identity, as well as future goals of teaching or life-coaching. Similarly, the corporations' validation of the participants' posts, via 'liking' and commenting (as demonstrated by the Alpro example in Sophie's quote above) provided them with a sense of achievement and validation of their subjectively interpreted 'health' knowledge. What is interesting about this metrification of health status, is that it becomes validated from external sources (Goodyear et al., 2017). Yet, this sense of gratification 'in the moment' or the potential of future achievements in whichever way that was subjectively aspired to, held no financial or tangible incentive or reward. Yet, huge amounts of their time were spent curating these images with accompanying texts and hash-tags, whereby these unpaid Instagram interns and apprentices hoped and awaited their own self-proclaimed assumptions and promise of a reward which may never come. Rather, the many platforms (Facebook and Instagram) that own and

capitalise on the voluntarily produced data reap all the benefits. As Cote (2014: 143) explains: "the conflation of the consumer-producer and work-non-work are hallmarks of the social web, of social media and of immaterial labour 2.0". These findings demonstrate pervasive variants of the human being and body being recast in a neoliberal market rationality (Crouch, 2011; Davies 2015, 2016; Moore and Robinson, 2016), through the commodification of 'health' and the body. Interestingly, the participants never raised the capitalisation upon and marketisation of their personal data as a concern related to a lack of privacy or ownership. Alarmingly, the participants genuinely felt that if the use of a platform or application was free, data mining was an acceptable 'trade-off'. This reflects Dubrofsky and Magnet's (2015) argument, which posits that privacy offers a 'limited lens' through which to think about these technologies and how users relate to their personal data. Similarly, Hjorth (2011) and Allen (2008) have argued that the everyday user often does not reflect upon the role of such data collection in wider systemic and political terms. However, in light of the recently enforced GDPR (25/5/18) such perspectives and practices may change. Perhaps a more nuanced critique would suggest that in living with these technologies as our companions (Rettberg, 2014), ensures sense of self and individual identity comes under such pervasive surveillance, that in turn, data mining is normalised. Therefore, as Verbeek (2005, 2011) and Idhe (1990) have suggested, it may be more effective to further examine the relationship between humans, technology and world relations, as a means of better understanding such potential invasions of privacy.

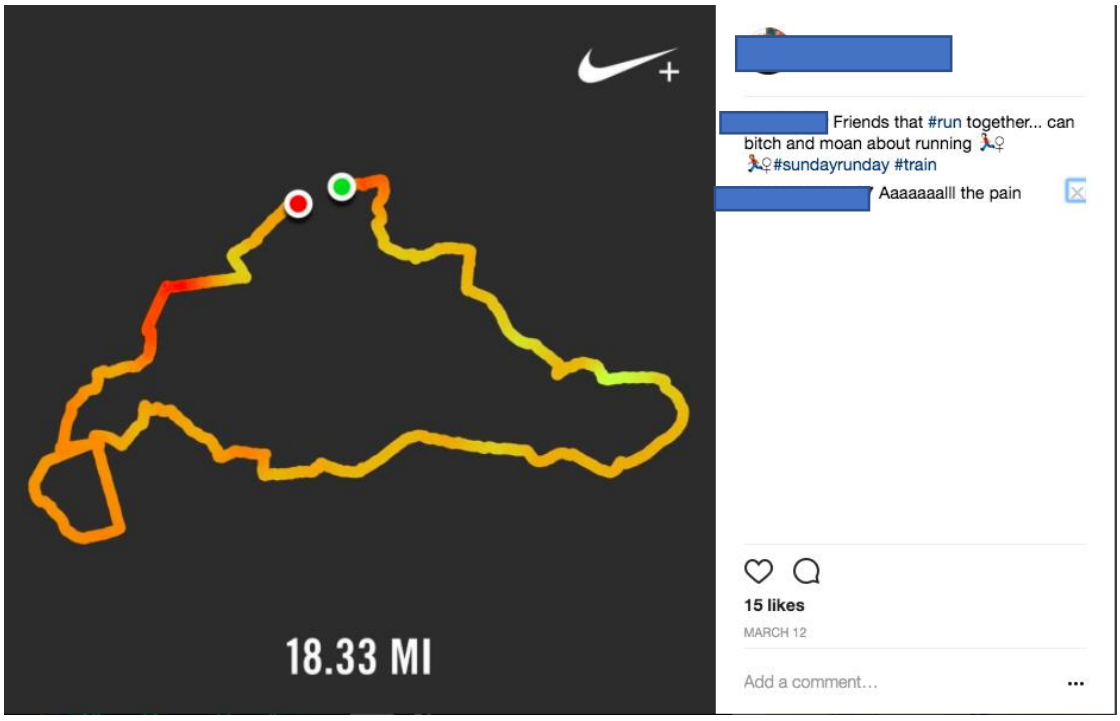

Fig. 20. Example of Participant Shared Data

8.1.5 Selfies versus Data Sharing

Much of the literature around self-tracking postulates that an abundance of data is beneficial for individual health (Kelly, 2011, Moore and Robinson, 2016). However, these research findings have

identified and analysed the multiple strategies and representational technologies and tools the participants adopted to perform a version of an idealised 'healthy' self and body on social media, which interestingly, has mostly centred around more qualitative representations: images of the body, food, or locations the participants visited whilst exercising. However, over time, many of the participants who self-tracked also recognised the difference between sharing 'data' and sharing fitness or gym selfies, and perceived personal data to be less 'narcissistic' and self-indulgent than images of their bodies. Sophie, who shared both running data and gym selfies reflected that:

> "Maybe because it's something that is quantified, a picture is a picture but with the data there is actual information. I guess that people see that as more factual. Even if it's not true, it's more seen as credible" (Sophie, Final Interview, 31, F).

Sophie draws the discursive and problematic link between data and credibility in these metric cultures (Ajana, 2018). This was a common discourse that all the participants referred to without question, which reflects broader cultural trends related to data being perceived as truthful and impartial, without any biases. Data collection apps and devices promote data as "an always already good and productive practice" (Gardner and Wray, 2013: No Page). As Fotopoulou and O' Riordan (2016: 66) usefully identified in their work on the self-tracking device, 'Fit Bit'; "trust in the objectivity of data and quantified methods, or 'dataism' as van Dijck (2014) calls it, solidifies new modes of experience". Self-tracking and social media data, was conceived by the participants as a helpful, constructive and reliable tool for daily ('health') practices.

The participants recognised that considerations of the community surveying your posts means that certain content, practices or locations are not shared for fear of negative appraisal. As expressed by Lara when she was marathon training:

> "Fitness is a big part of my identity and running gives you the opportunity to track your progress on the app and share it for others to see. It's hard to share your gym progress unless you take actual pictures in the gym, I feel a bit self-conscious doing that in case people judge" (Lara, First Interview, 28, F).

Lara expanded that there are certain stigmas attached to sharing gym 'selfies', because this content is centred around the self and the physical body. 'Anyone' can take a selfie, which makes their body or health look desirable and aspirational, using certain beautifying filters to construct the ideal image (Gill and Elias, 2017). Fitness developments captured in data form were perceived as only achievable through personal commitment. Therefore, data representation was seen as being more legitimate than physical form, as it was perceived to be less self-involved. Statistical evidence, growth, improvement or development was perceived to hold more 'value' and credibility. This reflects and reinforces dominant discourses around data, which posit that it holds impartial and objective information (Kelly, 2011). Therefore, it is not often taken into consideration that data scientists and algorithms are created and constructed with, by and through human input (Duffy,

2014). Alarmingly and most worryingly, the participants did not consider this when using self-tracking technologies and social media, and perceived data to hold no vested interest.

8.1.6 Life-Stylisation of Health Through Social Media Sharing

The different types of content and self-representations shared on social media by the participants ideologically and discursively conveyed different health identities and determinants in the performance of what is 'healthy' for the online community. As Mennel et al. (1992: 36) explain: "the social value attached to food, health and physical beauty has risen constantly in the second half of the twentieth century", thus blurring the ideological boundaries between 'health' and 'lifestyle' (Cederstrom and Spicer, 2015; Davies, 2016; Lewis, 2008; Moore 2017). As briefly discussed in earlier chapters, this was frequently framed through representations of 'healthy' lifestyles. This section will examine in depth the representational tools participants employed to enable such representations and will question why the life-stylisation of 'health' became such an effective discourse in their 'healthy' identity creation. As demonstrated by Tim:

> "We visited the highest viewing platform in Europe so of course the first thing in my mind (other than the amazing view) was to get a pic of myself doing a handstand! This is something I am slightly obsessed about doing in special locations (…) It's partly a way of expressing my sheer delight in a yogi style about being in such beautiful and special surroundings. Reasonable amount of feedback. I was already buzzing today from everything else but the likes, feedback etc. added to my pleasure for sure :)" (Tim, Diary Entry, 34, M).

For Tim and many of the participants, styling representations of 'healthy' behaviours in locations they visited was a common practice. For Tim enjoyment of the beautiful surroundings was 'enhanced' by exercising in these locations as well as providing a scenic backdrop. Feedback from the online community, related to both exercising and the picturesque setting also provided additional pleasure. As Lou described:

> "Distance I think is something that is interesting to share because actually the first question I'd always get was 'oh my god how far did you run this weekend?' I'd say '16 miles' and they'd say, 'that's so ridiculous'. In terms of stats, speed and hills climbed, I find it a quite self-indulgent thing to share. It's almost too much bragging. For me, my sharing was kind of influenced by the fact that I wasn't necessarily staying out as late as other people, because I needed to go home because I needed to get up the next day. I wasn't going to all the events I should have been going to or I'd be arriving late to it because I had to do a run in the morning. I think for me it was a bit more of that social side of sharing, being like 'I am still doing cool stuff, I am still going to cool places'" (Lou, Final Interview, 29, F).

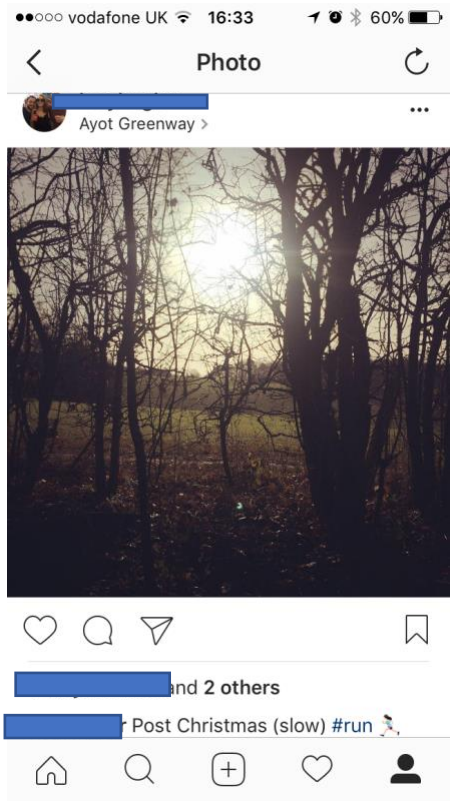

Fig. 21. Examples of Participant Shared Content.

Just sharing screenshots of self-tracked distances (for the runners) from apps was often considered uninteresting by the sharers themselves. Therefore, the participants life-styled their posts, by taking pictures of where they were going, in an attempt to make their behaviours more relatable to others.

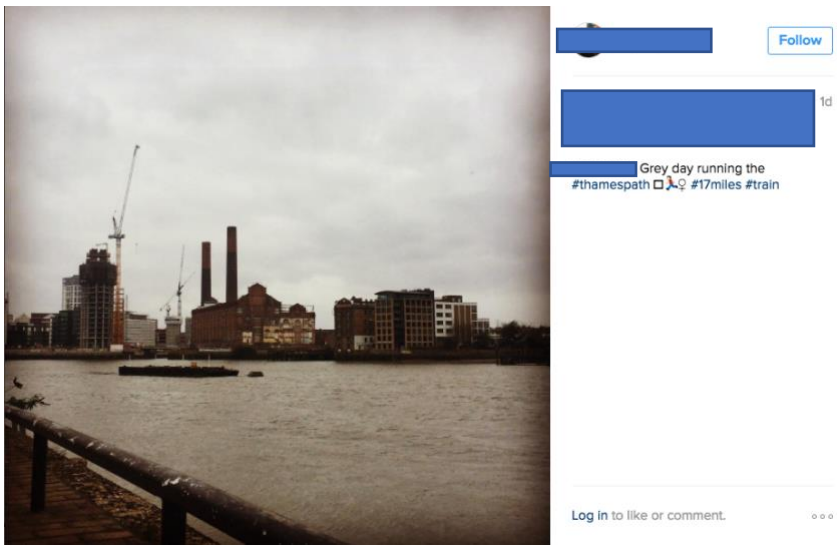

Fig. 22. Examples of Participant Shared Content.

Sometimes this desire to capture a 'picturesque' running location, or aesthetically pleasing meal, detracted from the participants' enjoyment of what they were actually doing. In this way, we can see the life-stylisation of health occurring, as well as the collaborative aspect of individual health in these sharing spheres. These examples and practices extend Lucivero and Prainsack's (2015)

arguments around technologies as lifestyle products, which blur the boundaries between regulated medical devices and consumer products. Not only does capturing 'health' become life-stylised with these ambiguously defined devices, but so too does exercise and evidence of 'health' through representations on social media. 'Healthy' behaviours are enacted by the individual, captured and represented on social media, for their own benefits, as well as for the community, who through feedback loops, simultaneously become a part of the health identity of the sharer online and offline. This in turn is "reconstituting the norms of living and living as a human subject" (Clough, 2010: 11), through the use of technologies of the self. These processes affect and in turn encourage the participants, either through pressurising influences or pleasurable motivations for 'healthy' offline behaviours. These life-stylisations of 'health' also became a form of public diarising for the participants in the sense that they felt it represented their whole identity, not just their health. As Sophie asserted:

> "I guess it's almost like a diary for yourself, a public diary even though you're not going to be as honest in a diary online that is public and online about something that is private" (Sophie, Final Interview, 31, F).

Sharing 'health' practices on social media therefore, can be used as a form of public life and memory logging, to look back over 'health' developments but also all aspects of the participants' lifestyles. The relationship between health and lifestyle became even more entwined with these data sharing cultures, as lifestyle became representative of body image. As Tim narrated:

> "Over the previous 5 weeks snowboarding had taken over yoga as my main form of exercise. I particularly enjoyed making and sharing this vid as it was a culmination of weeks of riding, exploring and improving on my board. I was reflecting on what I'd been doing for the past month or so and was pleased with my progression in riding, fitness and video making skills!" (Tim, Diary Entry, 34, M).

Therefore, these carefully curated and mediated representations take a huge amount of the participants' time and require technological literacy to achieve the desired effects. In this regard, the life-stylisation of 'health' includes the documentation of fitness and skill progression, as well as technological fluency. For example, Fet's posts below combine self-tracking data from his 'Map My Ride' app, with images of his cycling attire and his bicycle:

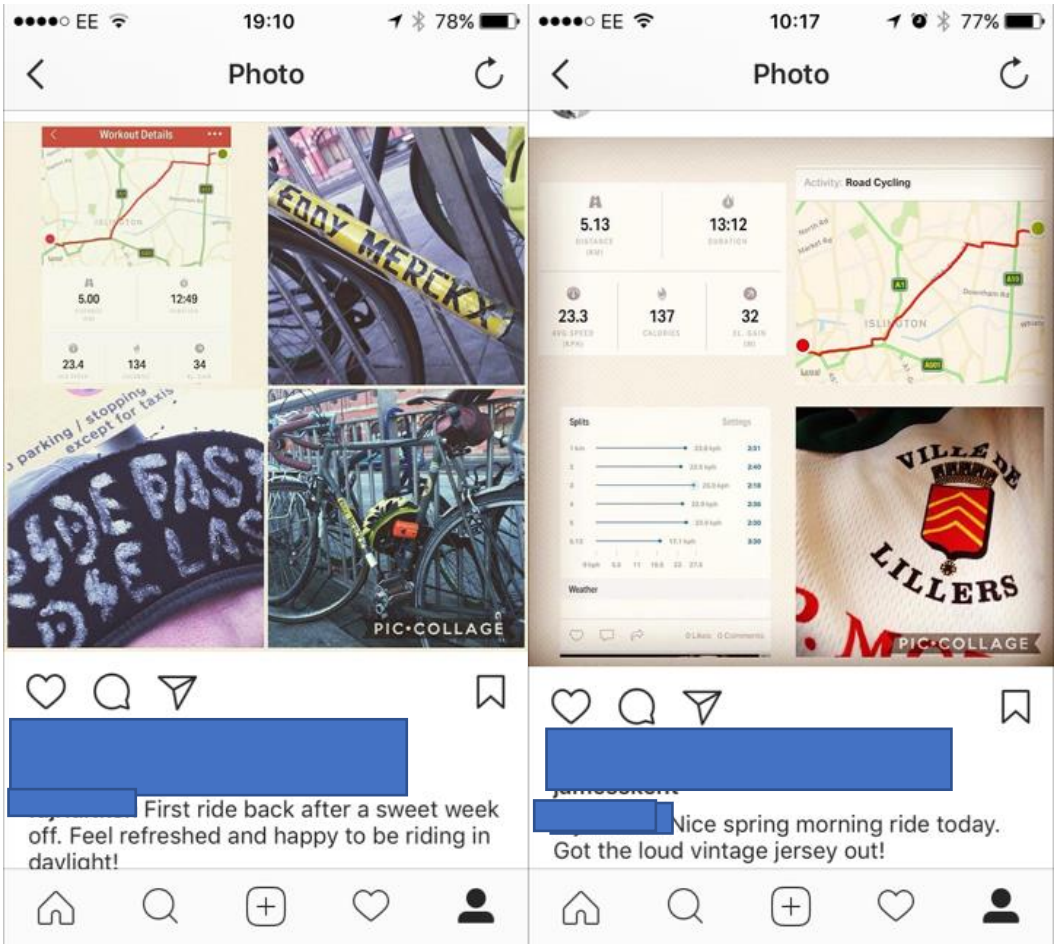

Fig. 23. and Fig. 24. Fet's Cycling 'Piccolage'

As Fet described:

> "To start off with I didn't share, but as I was on sitting on the train and thought, 'I've seen someone do a little collage thing and thought, 'oh, that's quite cool maybe I can mix my map, my time and particularly my jersey.' I'm not going to lie, I love my vintage jerseys. No one else has them. Even if I'm cycling next to someone, they always comment on the jersey. It's nice to get face-to-face validation of what you're wearing. It's cool. I guess I wanted to jazz up my post by adding these collages. I put a picture of my bike because I know my bike is sick. It's a vintage bike. I just thought if I do have an audience, they might like this more. They might like to see who I am actually, rather than just seeing a picture of the map and numbers. But I never posted my face or anything" (Fet, Final Interview, 30, M).

In this extract, taken from his final interview, Fet explained in detail why he chose to include this variety of photos, constructed on 'Pic-Collage' (Instagram application). Like Tim, Fet spent a lot of time photographing in creative ways what he perceived as different aspects of his identity (cycling hat, jersey, and vintage bicycle), and screenshotting his commuting route and data from his self-tracking app. Utilising his technological literacy, this was in attempt to document his cycling progress in an imaginative way and to put forward a more holistic representation of identity as a 'stylish' and 'healthy' cyclist. This first section has examined in depth how the participants' used

socio-technological tools within self-tracking technologies and social media to curate and perform idealised 'health' identities. This following section will analyse how these performed identities changed over time, as they sought to balance platforms within these mediated and curated identities, through shifting social media etiquettes and digital 'detoxing'.

8.2 Part 2: Social Media Etiquettes and Digital Detoxing

8.2.1 Balancing Platforms

As explored in all the analytical chapters, the participants shared their health and fitness-related content and data on Facebook and Instagram. Yet, balancing what content went on which platform (as well as other platforms they regularly used) was an important ongoing deliberation for them all. The dominant and most frequently used and shared upon platform was Instagram. Certain types of content were deemed unsuitable for Facebook, as Annie explained in her final interview:

> "[Instagram] It's all about pictures, whereas Facebook I'd write a lot and I'd do a lot of videos, all these albums and hundreds of photos" (Annie, Final Interview, 27, F).

For the participants, Facebook was used to upload more images and write in more narrative forms about daily lifestyle and health goals (met). Instagram, perhaps unsurprisingly, was more focused on the visual documentation and representation of health, with a 'less is more' approach; less quantity but a better perceived quality of images. As Annie described:

> "Instagram was basically stills of the same – fitness selfie, food and the gym. I'm using Instagram for a sexier approach as this seems to reel in all the fitness fanatics so photos I post on here would not usually go on other platforms. I also posted a booty progress update – as I am doing this weekly at the moment" (Annie, Diary Entry, 28, F).

This discourse of 'health' being 'sexy' and desirable, was a common theme throughout the research findings and was a representational strategy Annie and Sophie adopted to gain more 'followers' and exposure on Instagram. This resonates with Heyes' (2006: 137) assertion that: "The social rewards that accrue to being slim are very real". Heyes attributes the cycle of dieting, of 'elation' and 'failure' to a sense of reincarnation through self-organisation. The "hyperbolic construction of 'success stories'" *(ibid:* 145) contribute to this inequality as the narrated fabrications denote a discourse of reincarnation of one's self and body, which is potentially achievable or always just out of reach. These findings demonstrate the rise of aesthetic self-tracking (Elias et al., 2017) and the normalisation of positioning (representations of) our bodies as subjects of excellence (Gill and Scharff, 2011). These "entrepreneurial modes of selfhood [are] centred on labour, measurement, comparison and (self-)transformation" (Elias and Gill, 2017: 3) and increasing pervasive surveillance of the self and others. Lara reflected on this in her diary entry:

> "When I look at Instagram, it is mainly at photography and yoga accounts. I do think I want to look a certain way and doing exercise regularly is a way of achieving that, I'm now trying to do that" (Lara, Diary Entry, 28, F).

However, these representations of, particularly female bodies conformed to slim, sexualised and idealised body shapes, and because of this, the other participants felt that if they could not conform to these same bodily ideals with their images, they had to consider what they could 'get away with' posting. What must be recognised here is that only half (six) of the research participants were female. None of the six male participants mentioned any concern about wanting or avoiding sexual or thin-ideal objectification of their bodies. Extending Rettberg's (2014) important argument, which asserts that technological filters are entangled with cultural ones, beauty apps do much more than simply reinforcing established cultural ideas about (female) attractiveness. They contribute to the "'anestheticising' and '(de)familisaring' effect of seeing ourselves through technological–cultural filters" (*ibid*: 25–26). Worryingly, not feeling attractive 'enough' to be sharing images of their bodies for fear of negative judgment from others online was a real concern and pressure for most of the female participants. None of the male participants highlighted this as a personal concern. As Lara narrated:

> "I shared a selfie of my run onto Instagram and Facebook; I nearly didn't add it onto Facebook as I don't really like the photo (…) I was more focused on the run than taking a 'nice' picture but it was all I had so went for it. I feel there are a larger group of people on Facebook to see and judge I guess, but I was pleasantly surprised that people were really supportive, and it gave me a boost. I want to keep at it - the running I mean, not posting selfies!" (Lara, Diary Entry, 28, F).

Overall, interestingly, Facebook was perceived to be more 'public' than Instagram as (both male and female) participants had more 'friends' on the platform, which enabled a broader context collapse of networks, for example, links with friends, family, acquaintances, and colleagues' past, present and potentially future. Instagram, therefore, was perceived as less judgmental, as participants tended not to have 'followers' and networks linked with all aspects of their lives. Participants therefore, felt that this was less worrying in terms of what content they shared and how they may be perceived, especially for those users training towards specific goals. As Annie reflected:

> "I plan on just taking a backseat and building myself up, I'll do a lot more on Instagram definitely. I'll be swapping over platforms a bit I think, less pressure on Instagram" (Annie, Final Interview, 28, F).

Therefore, the perceived judgement imagined through Facebook was diminished when sharing on Instagram. Instagram was conceived as a safer and more private space, enabling the sharing of imperfect pictures, personal information or storytelling. These findings support Trottier's (2012) work on interpersonal surveillance and Moore's (2017) work on self-tracking in the workplace,

which both identify how users' perceptions and management of their own visibility online, and the visibility of others, are tied to shifting understandings of what is considered public and private information. Lara reflected on this in her final interview:

> "I feel like Facebook is a lot more public, I feel like Instagram is a lot more journal-ly, (…) so maybe that's a side that supports mental health. I don't know. I still feel that mental health has a bit of a stigma the way people view it as 'oversharing'. Someone's commented on one of my photos and I then went onto hers and there is a lot of disturbing stuff out there. She was into suicide survival. It was all very depressing on her page and it was all very vocal about stuff that a lot of people do keep personal, but I was wondering how encouraging that was and if that was healthy or not" (Lara, Final interview, 28, F).

Instagram was perceived by all the participants as a platform for journaling or diarising. Due to the stigmas attached to mental health issues and eating disorders. Instagram was, compared to Facebook and other social media platforms (Twitter, Snapchat etc.) perceived as more private and therefore supportive to tackle, document or discuss personal (mental health) issues. Annie interestingly re-framed this in a utopian way and articulated her use of Instagram as a 'goal board':

> "It's like scrolling through my own desires, my own wants, I use it to inspire me to better myself rather than caring about what anyone else is up to right now" (Annie, Final Interview, 28, F).

In this way, Instagram enabled the participants to conceptualise their individual desires, wants and ambitions, and this data to be subsequently visualised and 'liked', captured and documented and returned to as a companion (Rettberg, 2018). However, as Talbot et al. (2017) identified, the repetition of images of the body ideal, which is an often unattainable and unrealistic construction of both feminine beauty (and masculine strength) can lead to a decrease in body satisfaction. Although Talbot et al. *(ibid)* were researching 'thinspiration,' 'fitspiration' and 'bonespiration images shared on social media, and this analysis focuses not on the circulation of thin-ideal shared content, there are overlaps between 'thinspiration' and 'health-related content' in terms of their damaging impact upon both the female sharers and their audiences, in terms of how they perceive and judge their bodies. More worryingly perhaps, content that prompted healthy practices and 'fitspiration' was often perceived by sharers and their communities as 'allegedly healthy' and mentally better' than 'thinspiration' content. Yet, it contained very similar imagery of particularly female bodies: thin and toned. Although the participants attempted not to conform to the visually idealised body image and shapes, this was often impossible in these comparative data sharing health communities. As Talbot et al. (*ibid*: 5) identified: the "everyday user could, therefore, be at risk of viewing this potentially harmful content that idealises the extremely thin female body". Although it is clear that the participants used Facebook and Instagram to share different content in different ways, this was often with a preconception of how those imagined communities would perceive and potentially judge it (Anderson, 1983). Instagram provided participants with a space

for more personal diarising and Facebook enabled broader and higher quantities of content to be shared. Yet, both afforded the participants a platform to represent idealised 'healthy' bodies and identities, or at least notions of what that could and hoped to look like. In this regard, if surveillance and organisational profiling are a condition of contemporary society in the digital age, interpersonal and lateral surveillance have become accepted as the norm (Trottier, 2012).

8.2.2 Balancing Oversharing and Showing Off

Within these sharing communities there is a 'trade off' between managing privacy and achieving public exposure (Tufecki, 2008; Boyd and Hargittai, 2010). Mediated representations of the self are often carefully constructed to demonstrate 'authenticity' of content and character in an attempt to not 'overshare'. Personal branding online becomes synonymous with authenticity, without perhaps a recognition that authenticity is very much a social construct (Sternberg, 1998). Broadly, 'oversharing' refers to both the frequency of posts as well as the content determined as inauthentic or desiring of attention (Kent, 2018: 66-67). Oversharing is associated with attention-seeking gratification, perceived negatively by others within the community. If self-censorship is not appropriately maintained, the sharing of certain health practices is perceived (whether real or imagined) by the wider community in a critical light as 'oversharing' (Kent, 2018: 67). Using social media platforms to celebrate individual achievements or goals met was a key motivator to share content online. 'Showing off' in this way, however, was interestingly achieved in different ways and for many different reasons. As discussed in the first section of this chapter, Lara life-stylised many of her marathon training posts:

> "If I was out on a run and I happened to see something that looked nice, I might take a picture and then casually drop in that that was on a run. You still are then hinting to people, 'I go running'" (Lara, Final Interview, 28, F).

Rather than explicitly stating training goals, Lara shared posts of places she visited to 'hint' that she was running. She explained that this felt less attention-seeking. For Tim, 'showing off' was framed through feelings of pride:

> "My post contained a video of myself doing yoga (as most do!) It was something I'd been practicing for a while, I wanted to share it a little bit out of pride for my hard work and progress" (Tim, Diary Entry, 34, M).

'Showing off' health and fitness progress provided additional gratification for the participants, but interestingly did not prevent them from continuing to share similar content. As Roy attested:

> "It's a way to share things with my friends. It took me a while to get over the hurdle of being viewed as a show-off (which is very prominent in my offline social circle), but if sharing the things I do interests other people, why not?" (Roy, Diary Entry, 26, M).

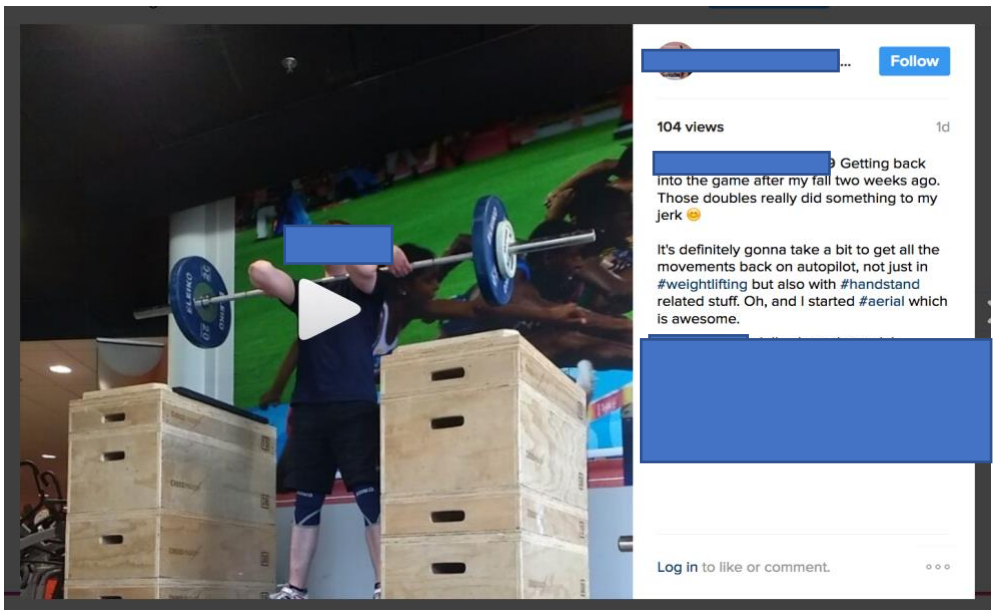

Fig. 25. Roy Weightlifting Video

Roy acknowledges that some of his sharing practices were considered attention-seeking from his offline social circle. Yet, this legitimated his sharing because he considered the community and voyeurs online as wanting to see his updates. This resonated with Goffman's (1959: 139) arguments that the balance between sharing (performing) and concealing is mediated by the traditions of a group or social status. Furthermore, showing-off was also practiced and mitigated by the frequency of the participants' posts:

> "I also posted something last Friday (20-01-2017) so I felt no need to post something so soon" (Roy, Diary Entry, 26, M).

Unspoken yet clear community etiquettes in these data sharing cultures outlined that regular posting was expected (as examined in the previous chapter). Yet, regular 'showing off' was deemed to be 'oversharing' within these communities. Therefore, posting regularly, but not *too regularly* was key. As Roy stated:

> "It's something that annoys me in other people, like when someone has six videos in a row. It's like 'I like seeing your stuff and I like talking with you', but I do not need to see every single bit of your workout" (Roy, Final Interview, 26, M).

Therefore, quantity over quality of content, was deemed oversharing. In Roy and many of the participants' terms this was exemplified by showing 'every' bit of your workout, rather than one image. Thus, this was considered too much information (colloquially 'TMI'). Continual adjustments, therefore, were made regarding what and how much content was posted and performed, in relation to the (perceived) judgment from the community (Marwick and boyd, 2010). Oversaturation of content was considered by the participants to devalue it in some intangible way. Interestingly, Roy provided a comparable offline example of this:

> "It's like when you meet someone on the street and you start talking about something and maybe they tell you about what they do. Oversharing is like also telling you where they live, how their childhood was, if their Mum or Dad was around. It's like 'I don't need this stuff - why are you sharing this for'" (Roy, Final Interview, 26, M).

To overshare then, was conceived as stemming from the (over)sharer lacking something in their personal life; a type of 'wanting' and a need to fulfil a personal emotional void (Gilroy-Ware, 2017). The same therefore, could be said of oversharing in the offline sphere, which required an emotional need for support, help or advice. As Sophie expanded:

> "My motivation I guess for sharing was to get acknowledgement from people that I'm doing well and feel good about myself. There is a definitely an element of wanting to show off too, definitely the habitual thing of just wanting (…) gratification, generally people want to be loved. They want people to like them, they want to feel good about themselves. It's quite a selfish thing, because people generally don't post because they think I genuinely want to help someone today. You post because you want to feel good about yourself" (Sophie, Final Interview, 31, F).

Most of the participants were concerned about being perceived as show-offs' and being judged poorly by their communities. For Tim, there was a tension between wanting to post and update his community, gaining attention, but not wanting to 'show off':

> "I do get mixed feelings on posting and the amount of people that might see or comment on that. I guess just from a point of view that I want to post things, to share what I'm doing, to share my happiness and pride in what I've achieve and progressed in and if that can inspire a few people, then that's cool, I really like that. If I get a little private message saying 'oh, Tim*, I'm really loving this and I'm going to give it a try' or 'it's put a smile on my face today', I love that because that's really nice. But then if it's a load of people saying it then I feel a bit, not insecure, that maybe it's gone to another place that I don't necessarily want" (Tim, Final Interview, 34, M).

Here we see some interesting tensions between sharing content being seen as 'showing off' and a simultaneously feeling of gratification, gained through feedback and 'likes' on these types of posts. The participants experienced an internal conflict between appearing (as well as personally feeling) too desiring of attention and wanting to share. Tim referenced this when he stated that:

> "I wouldn't want to have a post that would have you know hundreds of likes and loads of people saying you're great, 'this inspired me'. I'd really struggle with that" (Tim, Final Interview, 34, M).

A certain amount of 'likes' or feedback can make the user feel exposed or attention-seeking. Similarly, for Roy, in the final interview when reflecting upon his diary entries and social media posting more generally, he expressed contradictory traits. He expressed emphatically that he did not like being the object of the community's gaze and did not identify as enjoying being the center of attention. Yet, sometimes he automatically shares things as a 'no brainer', which legitimated it as being in the community's interest.

As briefly discussed in the last analytical chapter, sharing to fulfil a need that perhaps was not being met in the participants' personal lives was a motivator to share and 'show-off' on social media. This was identified as becoming a habit, a sense of feeling good about oneself because the community 'liked' the participants' lifestyles, personal activities or events, as evidenced in their posts. This was recognised as additionally gratifying when the participants had not posted for some time due to personal events. As Annie wrote:

> "[I] posted a couple of photos about Matt and I signing out tenancy today (…) It felt nice to have something to post about!! I felt happy to share our happiness with the world" (Annie, Diary Entry, 28, F).

Sharing any life event unrelated to health, for example, ensured the participants 'happiness' was considered legitimate to 'show off' and share with the wider community, particularly when they had not for personal reasons been able to post for some time. The participants experienced frustrations at not being able to post and felt a desire and compulsion to contribute regularly to their online narrative and idealised 'healthy' self.

Fig. 26. Examples of Participant Content Shared

8.2.3 Social Media Compulsion and Addiction

This and the preceding chapters have identified the many habitual practices and processes related to social media and self-tracking platforms daily (and hourly), from the perspectives of the research participants. The compulsion to use these platforms was a recurring theme, including the habitual surveillance of others within these networks. 'Addiction' to social media, which refers to compulsions towards its use and its negative impacts on wellbeing (Lupton, 2016), is becoming a common discourse that academic literature is now attending to. For example, psychiatric research identifies social media addiction as a specific form of technology addiction (American Psychiatric Association, 2013; Journal of Psychiatric Research, 2018), which manifests itself in:

> addiction-like symptoms, including salience (preoccupation with the behaviour), mood modification (performing the behaviour to relieve or reduce aversive emotional states), tolerance (increasing engagement in the behaviour over time to attain the initial mood modifying effects), withdrawal (experiencing psycho-logical and physical discomfort when the behaviour is reduced or prohibited), conflict (putting off or neglecting social, recreational, work, educational, household and/or other activities as well as one's own and others' needs because of the behaviour), and relapse (unsuccessfully attempting to cut down or control the behaviour) (He et al., 2018 [2017a]: 84).

This thesis does not attempt to determine in psychiatric terms whether social media addiction should be an established clinical classification (He et al., 2017). However, what is of importance is examining the impact and characteristics of these addictive and compulsive traits upon

participants' everyday lives, and how these symptoms were in many respects similar to established addictions (Dong et al., 2012). In relation to the participants' use of social media, the traits of addictive behaviours as outlined above by He et al. (2017) were exhibited by all the participants. Interestingly, some participants described themselves as having addictive tendencies towards social media. Furthermore, those that did not refer to themselves as social media 'addicts' did indeed all demonstrate addictive behaviours in relation to platform use, and expressed compulsive desires. For example, sharing aspects of their everyday lives became a compulsive practice for these participants, even in regard to activities unrelated to health:

> "In my head, whenever I was doing anything I was thinking (…) 'what can I share online?' (…) I was just obsessed. I can't go down the beach without getting a picture, what's the point? Every single thing that I was doing, even if it wasn't to do with fitness, if there was an occasion I was thinking already in my head: 'oh, brilliant opportunity, how am I going to put this on social media'" (Sophie, Final Interview, 31, F).

Frequently, the impulse to simply share for sharing's sake became for most of these participants a daily occurrence, which evolved into an increasingly inherent desire to divulge all aspects of their lives on social media. The participants became "overly concerned about social media activities, driven by an uncontrollable motivation to perform the behaviour" (Turel et al., 2017b: 84; Dong and Potenza, 2014). Being invited to an event or making plans socially or professionally provided participants with a gratifying sense of life being busy and social, and contributing to a form of status and identity as social middle-class professionals, in contemporary digital capitalism (Wajcman, 2014). To extend Wajcman's *(ibid)* argument, social media (and converged self-tracking technologies) enabled participants with a representational outlet to perform such identities. However, what was of particular interest was that alongside the ability for performative self-representation, was the participants' sense of elation in knowing such 'events' enabled opportunities to capture a busy social life and to then share these self-representations on social media. Bizarrely, the gratification from posting at times became the dominant focus and motivation for these participants to attend events, socialise and undertake certain activities, demonstrating the normative and naturalised embedding of these technologies of the self, and their interference in participants' everyday lives (Dong and Potenza, 2014). In turn, the representation of an idealised online life captured and shared on social media, motivated the offline and lived experiences of these individuals. The significance of this curated online representation directly forming and moulding offline experience was exemplified prominently during the participants' exercise regimes:

> "I think it had just become such a thing that I was running and I would take a photo when I saw something interesting and then I'd post it and be like 'hey look what I've done this morning' and I was like 'oh god, I haven't seen anything interesting and I'm almost at the end, it's going to have to be a picture of my shoe. I was like 'no, you're not running to get a picture, you're running to get the distance that you've done. You're just going to have to not post anything today'. It just became a bit ridiculous. I was freaking out, not over the fact that I've not run far enough, more that I'm nearly home and I've not got a picture. I think

> that made me reassess what I was doing, it shouldn't make you that stressed" (Lou, Final Interview, 29, F).

Here Lou reflects in her final interview, whilst marathon training she became extremely concerned and 'stressed' about capturing a scenic representation of her training runs. For example, if a run was not picturesque in a way she could document on social media, this sometimes motivated her to keep running so she could find a more visually attractive location to photograph and then share. If not, she felt anxious that she had not documented her run in a way that the social media community would deem interesting or aesthetically pleasing. Thus, although she always met her training goals, the lack of representation of this interfered with her sense of pleasure and gratification gained from running (Dong and Potenza, 2014). This tension was similarly demonstrated by Sophie when trying to capture her physical muscular growth and 'gains' from boxing in the gym:

> "At the gym I asked the guys I was training with to take pictures for my Instagram. One took some really bad pictures and I got really frustrated at him. I was just really horrible, in my head I thought I'm going to get this amazing picture to post. I'd done all this boxing, I felt good, amazing progress. That was the first time I had started to notice some of my gains in my back and shoulders, thinking 'wow it would be cool if I can post a picture of that'. Afterwards I felt really bad for being rude to him" (Sophie, Diary Entry, 31, F).

In both Sophie's and Lou's examples, running or exercising can be wholly motivated by the desire to want to get a photographic representation, which can then be shared on social media. This often replaced their sense of emotional fulfilment from achieving personal goals. Sophie was irritated by her friend who did not capture an appealing image of her muscle 'gains' in the gym. Lou became annoyed when she could not capture a pretty landscape during her marathon training runs. Although the participants recognised these frustrations as 'ridiculous' and 'distracting them' from the purpose of why they were exercising, these visual defeats become a genuine source and sense of personal disappointment. Their addictions and compulsions centred around capturing the 'perfect' image of the healthy, fit self, and was satisfied when such representations were achieved. For example, Sophie spent hours in the gym trying to capture a 'good' image after the first (poor) attempt. When eventually satisfied with the 'ideal' representation of her body, she posted it on Facebook and Instagram. This demonstrated how time estimates, compulsive behaviour, overuse and tolerance became justified through personal bias (Lin et al., 2015; Rau et al., 2006) towards achieving representational goals and in this case the 'perfect image':

Fig. 27. Sophie Muscle 'Gains' Post

> "I feel great after posting the picture. I've had positive comments on Facebook and lots of likes on Instagram. I feel like checking the comments and how many likes I've had has taken over the whole evening though. It's addictive checking how many people have liked the picture. It's nice to see people who don't usually bother liking my 'selfie' pictures liking this picture. It's like they take it and me more seriously" (Sophie, Diary Entry, 31, F).

For Sophie, many hours became dedicated to photographing her muscle 'gains' in the gym, sharing it on social media and checking the feedback from the community. A sharer of a wide variety of health-related content (fitness selfies, food photography and self-tracking data), Sophie was very aware of who in her online network usually 'liked' certain content. This inverted panoptic gaze (Lupton, 2012b) (the surveillance of the community surveying her) on this post provided Sophie with additional gratification that those who usually 'like' or comment on data sharing (as recognised in the previous section) for its valued legitimacy, also 'liked' this image. This contributed to her sense of identity as a 'serious' 'healthy' role model and influencer on social media. It is therefore very important for these participants that their communities' perceptions were influenced and managed through these carefully constructed self-representations of 'healthy' bodies. However, checking 'likes' and feedback from the community to determine if it had been positively and 'correctly' received, took up huge amounts of the participants' time, often distracting them from their everyday lives:

> "My phone's just glued to my hands every night. Like, last night I was just checking my phone, how many likes have I got, just checking. it's weird. Why does it matter if you get

> loads of 'likes', but you feel good or if you don't get hardly any [you don't feel good]? It's hard to explain, but it just becomes obsessive" (Sophie, Diary Entry, 31, F)

Alter (2017: No Page) argues that neoliberal and developed societies hold an expectation of convenience, which has 'weaponised temptation'. These research findings identify the use of self-tracking technologies and social media as such tools of temptation. As Neff and Nafus (2016: 188) explore: "every time we glance at our smartphones (…) is to ask questions about how we want to make sense of our worlds, our experience and our bodies, and what we want to say to those companies that make it their business to help us do those things". However, this thesis challenged such an assumption, by asking do we in fact know how much control and knowledge these businesses have over our data and what they do with it. None of the participants could identify why the habitual and addictive nature of checking their phones was such a pervasive compulsive behaviour in their everyday lives. These perspectives provide certain ways of knowing what data is, why it is important, who gets to interpret it and to what ends. As Ajana (2013: 10) asserts: "citizenship is seen as becoming a hollowed out concept whose carcass is increasingly shaped around techniques of identity management". Technologies for and of the self then become addictive companions and extensions of our physicality, attached to our being whilst emotionally and technologically mediating our everyday lives and individual identities. Not knowing *why*, they returned to check feedback, participants were still seduced by the socio-technological affordances of Facebook and Instagram. The currency of acquiring 'likes' provided an intangible yet emotional value and contribution to their sense of self. Similarly, the surveillance of others' social media profiles also provided a sense of comradery: a unified community of health-orientated individuals. However, surveying and 'scrolling' similar accounts was also a common practice related to using social media, which distracted them from personal goals:

> "I did get distracted by yoga photos on Instagram- still haven't done any yoga as a result of scrolling. Feel I need to put boundaries on my time on that too, or give myself a rule, that if something inspires me, to take action instead of continuing to scroll. I've deleted Facebook from my phone to save myself from distraction" (Lara, Diary Entry, 28, F).

Scrolling on social media, caused some impairment in other life domains. In these examples, it diverted the participants' attention from doing their own exercise. Similar to documenting and sharing, scanning through health-related content drew the participants into a compulsive surveillant practice:

> "I do get the aimless scrolling thing. Sometimes I get locked into it" (Annie, Final Interview, 28, F).

The obsessive yet mesmerising practice of surveillance of others held within its own process the same compulsive traits of documenting and sharing the participants' own lives. The only way they felt they could reject the addictive 'hold' these practices had over their lives was to detox from

social media, which referred to deleting the application for a period of time or quitting altogether. Aside from these worrying traits and behaviours, what is also worth noting, from the perspective of the social sciences, psychiatry and the medical humanities, is the challenge of identifying the boundaries that constitute such 'addictions' (Turel et al., 2011). Another challenge for researchers is that the appropriate language and clinical terminology used to describe these behaviours and neuro-physiological states is not agreed upon (Lortie and Guitton, 2013). The distinction between an addiction (the indulgence of which brings pleasure) and a compulsion (the indulgence of which merely brings relief from restless anxiety) (Alter, 2017) for example, blurs linguistic and psychiatric boundaries with these technologies. In digitised societies, it has arguably become culturally assumed and almost expected that for many of us, checking our devices and social media has become compulsive. To put it in Sophie terms:

> "we are phone people" (Sophie, Diary Entry, 31, F).

Therefore, these findings contradict Nafus and Neff's (2016) proposition that many self-trackers use data to create new habits, stop or change new ones, when in fact this analysis identified that not only did these pervasive digital technologies provoke and reinforce existing habits, for example excessive exercise, calorie counting, or over-analysis and evaluation of the body (image), but also that they stoked anxieties and created new habits, which were often detrimental to the participants' mental and physical health and wellbeing. This manifested itself as participants comparing themselves to others' habits, exercise routines or body (image). An over-reliance on virtual support and gratification from feedback frequently distracted them from personal achievements, and increasingly personal enjoyment and experiences.

8.2.4 Digital Detoxing and Quitting Social Media

This final section of the last analytical chapter will examine the reasons behind the participants' shifting social media practices over time, in consideration of their increasing moves toward digital detoxing (the sporadic deletion of self-tracking and social media platforms) and final decisions to quit altogether. A key motivation for the participants to detox and 'break' from social media was when life was becoming too busy or stressful:

> "I haven't posted a lot recently. I have been quite stressed out with a few conflicts at home and been having a bit of a break from people and social media. We managed to secure a flat the other day. Yet the next day I was made redundant. Although it hasn't affected my training, my diet has been terrible, therefore I have not posted much" (Annie, Diary Entry, 28, F).

The participants' excused a 'break' from social media when personal and professional lives were overwhelming. This motivation was twofold. Firstly, when individual lives were stressful this often took time away from being able to enact healthy behaviours, for example, eating well and going to the gym as Annie details above. Secondly, when personal and/or professional life was demanding and overwhelming they felt they could not contribute to idealised representations of 'healthy' lives

or view others doing so on social media, as this contributed to feelings of comparative anxiety, inadequacy and personal disempowerment, which negatively impacted their sense of 'health self' and identity. As Annie highlighted:

> "At the beginning of this year, I had a bit of a breakdown and just couldn't really cope with anything, so I've come off social media, I just don't want to feel the pressure to prove to everyone what my life is like or spend all my energy lifting everyone else up. I've just got to the point where I need to concentrate on myself. I thought trying to save everyone else would in turn save me and lift me up but actually it just fully drained me, and I've had to step back" (Annie, Final Interview, 28, F)

As Annie explained, over long periods of time, continually posting and updating their online communities about their lives became an emotional pressure for the participants:

> "I felt that my daily commute is stressful enough to add another thing to it. I know it was only a weekly progress, but on Mondays I knew I was going to share after my commute, I just felt 'enough', I no longer wanted to be burdened by it" (Fet, Diary Entry, 30, M).

Not posting then, can be seen as indicative of the participants' attempts at enabling privacy, needing personal time and space away from social media, particularly during challenging times of their lives. Interestingly, the language used here articulated in these quotes from Fet and Annie demonstrate a discourse of social media providing a tangible emotional space in their everyday lives and routines, one which can be stepped away from. Therefore, although exhibiting a different motivation than was discussed in earlier chapters, the concealment of 'unhealthy' behaviours to avoid judgment from others in this case, similarly relieved the participants from being the object of their communities' gaze and judging their own lives through comparing lifestyles represented and viewed on social media. For the participants, filling the void with social media (Gilroy-Ware, 2017), meant that when they reflected upon these habits, they realised how much they had been drawn into consuming, addictive and habitual self-regulatory cycles of self-tracking, monitoring the self and sharing. Sophie highlighted this:

> "If you looked at social media usage pre-relationship ending and then post relationship ending, it's gone up hundreds of percent, I threw myself into it." (Sophie, Final Interview, 31, F).

Many participants recognised that changes in their personal lives, circumstances and mental health influenced their social media sharing and health practices (as well as the process of completing the reflexive diary, as examined in the first analytical chapter), which Annie described as 'coming away from it' physically and emotionally. For many of the participants, using self-tracking devices and sharing on social media was a habitual everyday practice. Social media was considered as integral to their daily routine, inseparable from the offline world. Therefore, when the participants' chose

not to share or not to use certain platforms, or wanted a 'digital detox', social media platforms were spaces that had to be physically stepped away from, thus highlighting the pervasiveness of its interpersonal surveillance (Trottier, 2012), and its dominant role in their daily lives. This resistance to technology was achieved by some of the participants, but they often had to reframe their resistance in medical terms to legitimate and motivate doing so; quitting 'just because' was not a discourse. The participants frequently recognised this digital detoxing as a challenge, for the benefit of their mental health, but also as something that was an internal negotiation and often an internal contention pulling at their addictive compulsions towards it. Due to the habitual use of social media, its addictive nature was experienced like a drug and with it followed a similar discourse to describe abstinence, 'giving up', 'quitting' or going 'cold turkey':

> "I used to always post on Facebook and now I barely put anything up, I think Instagram is just a newer fad. I think it will get boring or something else will come along. I don't think I've had any moments where it's some sort of epiphany, like 'that's it, I'm off social media, I don't need to prove myself anymore'. There's obviously still a bit of me inside, I still think I need to do this sometimes but I think it has made me reassess what I post and why, because you know you go through those phases of seeing people like 'this is my hairstyle today' and I'm like 'I don't care'. I don't ever want to be that person where someone looks at my post and thinks 'for god's sake'" (Lara, Final Interview, 28, F).

In her above quote, Lara discussed broader trends and social media etiquettes. For example, seeing others 'oversharing' makes current users paranoid, and aware of how they are perceived, which in turn can encourage participants to detox from their digital devices. Sharing etiquettes develop by seeing others oversharing, which prompts a consciousness that one does not want to be perceived in that way by others in the online community. In turn, this encourages silence online:

> "Now with Facebook's application of 'memories' (…) I find myself anxiously thinking I shared loads about everything'" (Fet, Final Interview, 30, M).

The Facebook 'memories' function nudges and prompts users to view content they shared on certain days of using the platform over the years (since they joined), which reminded Fet of content he shared which he now deemed as 'oversharing'. In turn, this caused him shame and embarrassment in regard to his previous (over)sharing practices. This impacted his current sharing practices as he felt embarrassed and uncomfortable about the amount he used to share, which prompted his silence online and a subsequent detox from Facebook. This example highlights shifting social media, sharing practices and cultures, which develop and emerge with the co-evolving process of aging alongside and with social media platforms:

> "I felt the need to stop sharing because I was getting more and more drawn into my devices and social media platform for something that I already knew, that I was improving with my cycling during my commute" (Fet, Diary Entry, 30, M).

This extract demonstrates both the seductive and persuasive nature of the technologies of the self, as well as the labour-intensive aspect of maintaining the representation of a 'healthy' lifestyle through posting related content. We have a right to disconnect and to interrupt networks, but in turn we still hold on to other versions of the social (actual and imaginary). We could then consider that social media networks (and the widespread disciplinary systems in which they are embedded) are an explicit attempt to construct social media and related interpersonal surveillance until it seems natural, and as though we cannot imagine our social lives or communicative practices without it. This perspective is reflected in Lou's words, when she draws together the emotionally embodied pressure to engage with these platforms and technology to gain connectedness online, which became such a normalised process it distracted her from her personal experience:

> "That was probably one of the posts where I was like 'you don't need to take a picture every time. What you're actually doing is training for a marathon, not proving that marathon training to other people, you will prove that training when you finish it. That's your goal, not 'likes' on social networks'. Just stop being an idiot." (Lou, Final Interview, 29, F).

Lou struggled to resist her own naturalised, normalised practice (van Dijck, 2014) to share on social media and to recognise when the pressure to document shifted focus away from exercise. Participants' who had 'detoxed' from social media were motivated to do so as they felt their social media use was damaging their mental health but struggled with abstaining from social media due to their previous habitual use. This challenges a once-dominant cultural discourse, which assumed that social media usage offered a break from boredom, or a habitual distraction tool. In practice, this behaviour became a habit, an addiction and a compulsion, which participants took time in order to decide to resist, detox or quit:

> "Honestly, as someone who now rarely shares anything online, I feel good because I no longer feel any pressure to post. Not to say that I had any pressure from other people to post. It was more pressure on myself to keep posting to hold myself accountable, when in fact I know exactly the result in my progress, in that I feel healthier and know that I am getting better" (Fet, Diary Entry, 30, M)

Social media sharing shifted over time in line with the participants' changing lives. Being a consistent inspirational figure to others on social media through sharing and documenting one's life constantly became an oppressive pressure. The continual self-regulation needed to self-track, capture, document and share became an exhausting process for all the participants at some point during the research period. Interestingly, even though the participants recognised that all social media and self-tracking users must feel this way, those that did detox or quit embodied feelings of being unique. For example, Fet considered himself 'different' and resisting conformity, by quitting social media:

> "By not sharing I have that power back with me, that I don't succumb to the norm I guess" (Fet, Final Interview, 30, M).

Therefore, the social media norms within these communities perpetuate the idea that sharing is the common practice and not sharing is the deviant behaviour. A sense of empowerment is achieved by resisting and quitting these persuasive and coercive technologies of the self (Purpura et al., 2011). The self therefore, feels liberated from overt disciplinary and regulatory control through technology and surveillance. For most of the participants, from a longitudinal perspective these sentiments were echoed. Yet, maintaining and improving 'health' was considered to always be a part of everyday life:

> "I'm pretty sure that yoga particularly will have a big part in my life, some people still do yoga when they're 85" (Tim, Final Interview, 34, M).

Looking to the future, all the participants saw themselves continuing with their 'health' and fitness practices but were unsure if they would use self-tracking devices to capture these practices or social media to document them. Those who were detoxing or had quit, did in fact see themselves returning in the future. Interestingly, this was due to feels of neglect towards the devices and platforms, as well as their online communities:

> "I still feel guilt sometimes (…) If I do post, nothing really gets commented on but when I used to do it tonnes of people would tune in. I feel like I've let people down. I still beat myself up when I think about it. I should've been stronger. I should've kept going. I know that one day when I'm in a better place I can go back and build up again and then it's another story isn't it. I miss showing people what a fun life you can have, what fun I have and just sharing. I have started making YouTube videos actually. Rather than putting pressure on myself every day, I'll film something and every two or three weeks I'll post (…) that's one way of getting something out. But it's weird because my whole life revolved around social media for so long" (Annie, Final Interview, 28, F).

As Annie demonstrates here, participants who felt that they missed sharing their lives online and missed their social media communities, often felt a responsibility towards them. This responsibility manifested as a desire to keep others online updated about individual life events ('health'-related or not). As examined in the previous chapter, expected sharing within the community was an embodied pressure. Yet, Annie's example highlights that these feelings are still prevalent, even when social media or self-tracking is identified as a being detrimental to the participants' mental health. Guilt associated with not sharing is not (as one might expect) diminished through the realisation that using these technologies, tracking and sharing, negatively affects one's sense of self. These technologies then, hold addictive, persuasive and influential power over our lives', for even when we resist them, we still feel a duty towards their use and integration into our everyday lives.

8.3 Conclusion

This chapter has analysed in detail the many socio-technological tools, ideological framings and discursive narratives participants adopted in their attempts to self-represent their idealised 'healthy' self and body on Facebook and Instagram. As Hogan (2010) identifies, 'continual adjustments' are made when we perform the self to others in person. On social media, however, that performance of self is mediated through a screen, a platform and through socio-technological affordances to an in part 'known' and at times 'imagined' community and 'audience' (Anderson, 1983). This enables the performance of different self-representations of 'health' and identity. It is through this technologically-mediated performance that self-representations of 'healthy' identities and bodies are created and curated. This final analytical chapter identified how continual adjustments are made on social media when feedback (or lack thereof) is received by participants' known or imagined social media communities. These representations are constructed with consideration of many social media community norms and 'etiquettes', which interestingly changed and shifted during the research period. Whether sharing for support or motivation, for appearing authentic or avoiding oversharing, the participants constructed most of their practices with the view to represent the 'idealised' body and 'healthy' self. Over time and through extended use of self-surveying self-tracking apps and sharing on social media, the types and modes of content shared changed due to evolving social media etiquettes, as well as the participants' own personal circumstances. These utopian representations were not maintained, due to the self-regulatory, addictive and compulsive practices these technologies of the self perpetuated.

The analysis identified 'oversharing' as a negative participatory process, which encourages self-censorship over saturation of content. It may be perceived as attention-seeking or overly self-gratifying, which in turn may provoke (imagined) critical attention from others within the (imagined) community. Amongst the participants, there was a privatisation and self-censorship of 'unhealthy' practices, or a lack of individual progression towards 'health' optimisations or personal goals. However, all the participants' acknowledged the importance of balancing the presentation of 'health' behaviours through degrees of self-censorship, to present the appropriate construction of their idealised 'healthy' self, within online and offline networks. This critical textual analysis, therefore, has made connections between how health and lifestyle have become representative of the 'self', through the representation of health choices and everyday behaviours. To achieve this mediated identity, the participants represented and moulded their diets and bodies to the desired aesthetics on social media, most prominently Instagram. They became disciples of 'health'; life-stylising 'healthy' behaviours into everyday life whilst attempting to avoid representations of 'obsessive' health identities. Through this they recognised and determined the value and role of (self-tracking) data representations of health over fitness 'selfies' and commodified their bodies and selves through such tools of curation, including hash-tagging ideologies and performing 'health' for the benefit of their online networks and for themselves. Over time however, these over-regulatory, addictive and compulsive self and community surveillance practices, led many of the participants to detox digitally, abstaining from these technologies of the self for a period of time, or

quitting altogether. Most intriguingly, when participants had quit temporarily or permanently, they still identified feelings of responsibility to social media to share their lives, highlighting the dominance of these platforms' integration into the participants' sense of self, 'health' identity and their everyday lives.

CHAPTER NINE

CONCLUSIONS

Much research has now attended to the use of self-tracking technologies in multiple settings such as work and insurance schemes, schools, leisure pursuits and in self-tracking communities (Ajana, 2017; Fotopoulou and O' Riordan, 2016; Goodyear et al., 2017; Kristensen and Prigge, 2018; Lupton, 2014, 2016a; Moore, 2017, Moore et al., 2018; Rettberg, 2018; Ruffino, 2014, 2018; Spiller et al., 2018; Till, 2018). However, this research has addressed a gap in the literature, which so far has failed to examine the use of these technologies in representations of 'health' on social media, and how these curated 'health' identities affect 'health' behaviours in users' daily 'offline' lives. This thesis provides a unique contribution to the expanding literature on self-tracking technologies and social media through its analysis of participants' processes and practices related to using these technologies to self-represent their 'health' identities, and how such performances under the online communities' gaze affected their 'health' behaviours and practices offline. This thesis, critically explored the use and influence of self-tracking technologies upon participants' self-representations within the context of social media (Facebook and Instagram), and their influence on offline health practices. Through theoretical framing in the review of the literature and critical textual and thematic analysis, this was contextualised within wider socio-political discourses. In particular, neoliberal rationalities, which have "fundamental preference for the market over the state as a means of resolving problems and achieving human ends" (Crouch, 2011:7), has shifted public and digital health practices towards self-care through discourses of self-responsibilisation. This concluding chapter will present a summary and discussion of the empirical research findings, whilst identifying the limitations of the thesis and scope for future research. This chapter will also explore how the unique triangulation of the thesis's methodologies over the extended (three-nine month) research period provided an unanticipated reflexive engagement from the participants. In particular, the reflexive diary, contextualised through semi-structured interviews, encouraged the participants' self-analysis of their own sharing practices and 'health'-related behaviours, which unearthed personal revelations for them and for the researcher. Therefore, a strength of these methodologies, and of this thesis, is the temporal, reflexive and influential nature of the methodologies, the participants' responses and the empirical findings.

9.1 Summary of Findings

Each of the analytical chapters to some extent represents part of the surveillant processes, practices and insights of using these technologies of the self, to manage, improve and self-present in an attempt to 'optimise' 'health'. The first analytical Chapter (Four), 'Health Identity and Methodological Influences', detailed the participants' conceptualisations of how they interpreted and understood 'health' and individual 'health' management, with reflections on how the research methodologies influenced and guided these personal revelations and insights. Self-tracking means that 'health' is now managed and controlled through technological devices, reducing human health and senses to those decipherable only through computer senses, which are calculable, efficient, and

predictable (Ritzer et al., 2012), as well as profitable. Good 'health' was equated to being fit and most importantly doing exercise (regardless of how frequently or how much was in reality achieved). Not being 'fat' or overweight was another signifier of being 'healthy' (Powell and Fitzpatrick, 2015). In this regard, some participants 'quantified' their 'health' numerically through counting vegetables consumed or by having parameters for what they determined was a personal 'healthy' weight, regardless of other lifestyle behaviours (poor food consumption or lack of exercise, for example). Sense of self then, was not considered something permanent; 'health' identities were considered as something that could be transformed, through self-surveillance and self-tracking the body, thus overcoming its perceived 'limitations'. The methodological approach of this thesis interestingly also became an integral tool for the participants to understand 'health' decisions and practices, expanding their conceptualisations and influencing future posts, diary entries and 'health'-related behaviours.

The second analytical Chapter (Five) focused in detail upon the self-surveillant aspects of self-tracking, sharing and surveying social media to understand one's own body and 'health'. Whilst the data supported existing literature on the potential for a self-tracking utopia in relation to data acquisition and 'health' improvement, this research extends and critiques the argument. The participants did often subscribe to discourses of 'self-betterment' through self-tracking, in whatever capacity that could be achieved. However, 'good health' was embodied through simple acquisition and representation of data, often over their sense of personal gratification or achievement, regardless of any improvements or achievements made. The participants exhibited sceptical stances towards the technologies' efficacy and accuracy. Yet, interestingly, this did not deter their engagement, ongoing use and self-surveillance. This chapter identified that self-surveying through self-tracking does not equate to 'optimal' or better 'health', for the mechanical measuring of input and output parameters promoted within self-tracking practices and categorisation became de-humanising and created reductive notions of 'health'.

The third analytical Chapter (Six) followed on from the previous chapter and examined how over time the participants' self-surveillance through self-tracking became problematic. Using these devices did, for a time, encourage the participants to enact 'healthy' behaviours. However, this enthusiasm to track and share diminished over time. The burdens of self-tracking, and the self-regulation promoted by these technologies became emotionally detrimental to their sense of wellbeing, mental and physical health. The participants perceived not maintaining 'healthy' behaviours (often due to circumstances outside of their control) as a lack of personal self-discipline. In turn, they struggled with internal contentions related to how to legitimate inactivity. This evolved into a moralisation of 'health', whereby 'health' and lifestyle choices became tied to ethical parameters of 'good' and 'bad' behaviours. In turn, self-worth became pervasively tied to data.

The fourth analytical Chapter (Seven), 'Motivations to Share and Community Surveillance', examined the community surveillance inherent in motivations for and practices within social media communities, and the more utopian ideals of sharing and using these platforms for sociality and as a tool for self and peer surveillance. By sharing health and fitness-related posts, the participants

became representative of a community of like-minded 'health'-orientated individuals, which they - even when nothing was being personally achieved - felt part of. This positively and optimistically contributed to their sense of self and identity as informed, educated and improving 'healthy' beings. However, when the participants experienced stress or trauma in their personal lives, the concealment of 'unhealthy' behaviours to avoid the negative judgment of others relieved them from being the object of the communities' gaze and judging their own lives through comparing lifestyles represented and surveilled on social media.

Finally, the fifth analytical chapter (Eight) analysed the process of sharing and representing 'health', fitness and the body on social media, and explored the challenges, pressures and problems which arose from being in the constant gaze of others. Lifestyle, diet and the body became frequently tailored around the desired aesthetics and specific etiquettes of certain platforms, and most importantly what was determined as visually pleasing on social media. Lastly, this chapter examined the anxieties that arose for participants from extensive self- and peer surveillance, through the use of self-tracking technologies and social media, which many decided to detox digitally from or quit altogether. This was informed by self-surveillance practices as well as peer surveillance, which were underlined by etiquettes of (over) sharing within social media communities and the feedback, or lack thereof, from these communities.

9.2 Discussion

Self-tracking technologies via health promotion strategies advocated by neoliberal states, and the corporations who market their benefits, have until very recently evaded critique and have primarily been promoted as revolutionary tools for health betterment. These social technologies assist with reflexive management of individual risk (Moore and Robinson, 2016; Nettleton and Burrows, 2003) and assume that the accumulation of 'health' information and the 'datafication of health' (Ruckenstein and Schull, 2017: 262) is better for individual wellbeing. This is a product of wide corporate systemic structures and neoliberal free market strategies of individualised health practices and self-management, adopted by citizens in their construction of identities, for themselves and their communities, to be responsible 'healthy' and morally 'good' citizens. Within these neoliberal frames, the body becomes subordinated through adoption of technology and control of the mind (Moore and Robinson, 2016).

Representations of the body, of 'health' and related identities, in the context of this thesis, came both from social media, as well as self-tracking technologies. The participants used both the process of capturing and sharing qualitative representations of 'health' (fitness or gym selfies or 'food photography', for example) in the same way as more quantitative representations of 'health' (self-tracking data, for example), for self- and peer surveillance, and self-motivations to enact 'healthier' activities, for 'self-betterment' and 'self-optimisation'. These participants' cultures and practices of 'health' management and improvement were situated within market economy discourses, and through self-tracking technologies and social media affordances, their self-representations could be neatly packaged, branded and commodified within the capitalist cycle of consumerism. 'Health'

then, became recognised within a discourse of commodification: a numerical or captured packaging of the self, through representational data, and a product that could be easily shared and circulated between communities, without consideration that this was sold (to third parties) for data mining. Through using these self-tracking and social media technologies, the participants were able to instruct, regulate, normalise and represent a curated and idealised notion of the active 'healthy' subject. These standards of judgement were conformed to through "consumer welfare" which "is needed [to determine] against which competitive behaviour is to be criticised and periodically stopped" (Davies, 2015:63). Such 'consumer welfare' consists of the adoption of self-tracking technologies and devices, and subsequent representations on social media to consume and perform competitive and comparative 'healthy' lifestyles to conform to these neoliberal standards and judgements. The continual representational practices that participants embraced, conformed to a commodification of the self (Ursell, 2000) through individualising and sharing practices. Their perceptions and representations of self and 'health' management reflected neoliberal self-responsibilising discourses (Cederstrom and Spicer, 2015; Crouch, 2011; Davies, 2015, 2016). Forlano (2013: 2) argues that this real and virtual hybrid space speaks to "a need for notions of place that specify the ways in which people, place, and technology are interdependent, relational and mutually constituted". This thesis, therefore, has attended to the use of self-tracking technologies and social media's performative capacities whilst recognising that we do not make choices to construct our 'health' identities in a social or cultural vacuum. Thus, the online community serves as a mediatory sphere from which to affect behaviours through feedback or a lack thereof, as much as providing the technological tools that can guide users' behaviours.

Social media function as a social venue to represent health practices. This 'health' self-presentation is carefully constructed under the consciousness of peer surveillance and (imagined) observation of others within social media. These constructions are arguably only enabled and achieved through a highly reflexive individual (Giddens, 1991) who is continually involved in self-monitoring, both online and offline. The participants often subscribed to discourses of 'self-betterment' through self-tracking, in whatever capacity that was individually determined. The embodiment of 'good health' and feeling morally 'better' and physically 'well' was enabled and supported through the accountability of sharing data and progress with participatory audiences. Sharing data, receiving feedback and being under the gaze of social media communities (both public and private networks) made them feel well, regardless of their actual developments or improvements. Most interestingly, if their community deemed them 'healthy', the participants embodied the community's gaze and feedback. Self-presentation online is carefully constructed through a balance between exposure and concealment of offline behaviours and specific 'health' practices. Sharing self-tracking practices is also intended for surveillance by the community on social media (real or imagined). The gaze of the others increases pressures upon the user to respond to and in turn represent their 'health' practice through certain 'healthy' signs. 'Health' is identified as being intertwined with many different areas of one's lifestyle. Thus, the sharing of self-tracking practices on social media became integral to the users themselves and to the wider online community, in terms of contributing to their sense of self as 'healthy' or 'unhealthy' individuals. Perceived relevance is key when these participants decided

between what to post and where, which was informed by platform-specific social media etiquettes. Pervasive tracking, sharing and surveillant practices dominated these participants' daily lives. Therefore, online and offline realms are not separate; there is no strict divide, as the wall between them is increasingly porous, at times irrelevant, and certainly not distinct.

Much of the literature around self-tracking discusses the positives that can be drawn from an abundance of data. In the case of this research study, self-achievement was experienced through the self-evidence of data, which to an extent meant that the acquisition of data enabled individuals to feel 'healthier'. Personal discovery and revelation was often enabled through these self-surveying practices and data acquisitions. For the participants, it was conducive to telling them 'more' about their bodies, and 'health' was identified as becoming intricately entwined with their sense of self, as 'good' or 'bad', 'healthy' or 'unhealthy' individuals. The participants used this data and self-representations online to "make sense of the world around them" (Duffy, 2014: No Page). In turn, the distinction between the physical body, data and the mind was renegotiated and shifted their normative definitions and understandings of what they considered a 'body', a person (Datteri and Tamburrini, 2009), 'health' and lifestyle. In turn, this shifted definitions of what they deemed 'healthy' or 'unhealthy' individuals and bodies, in whichever capacity that was determined by the devices.

These technologies challenge and shape our social values, meanings and understandings of how we interpret our bodies. When the body is reduced to data and then represented through self-tracking devices and social media, an over- simplification of the body and 'health' occurs. This has implications for how bodies function and operate, in terms of parameters of 'good' or 'bad', 'healthy' or 'unhealthy' individuals and lifestyles. Conceiving the interplay between, relationship with and construction of these technologies as a means of representing the body, the biological and health, this thesis has challenged the limiting concept of the 'data double', as a reductionist representation of the monitored body (Whitson and Haggerty, 2008: 574). The 'meaning' making from the data visualised extends further than has been proposed (Duffy, 2014). In fact, rather than providing something for the user to consume (and then share if they so wish), the visualisations are inductive, and a creation of a data story. As de Certeau's (1984: 129) asserts: "what the map cuts up, the story cuts across". A utopian perspective would view this online trail as an individual story. A dystopian perspective would consider these trails as conducive to control and surveillance. The negative impacts on 'health' and wellbeing, as a result of using these technologies, stemmed mostly from the dominating, regulatory and self-disciplining behaviours the participants adopted. These behaviours may to an extent empower an individual in optimising their 'health'. However, in a neoliberal age, where individualising self-regulatory practices are discursively advocated through the distancing of state support, individuals are reduced to consumers and personal 'health' is now a commodity to be packaged and shared. This thesis, therefore, does not consider the state as "a force with necessarily clean hands" (Crouch, 2011: 172). The promotion and practice of self-tracking can only be conceived as an embodiment of the neoliberal individualised practices the state and

corporations of late consumer capitalism has enforced upon its citizens (Moore and Robinson, 2016; Moore, 2017).

Broadly speaking, these technologies challenge and shape understandings of how we interpret our environment. Individual 'health' has become collaborative in these data sharing spheres; 'healthy' behaviours are enacted by the individual, captured and represented on social media, for their own benefits, as well as for the community, who through feedback loops, simultaneously become a part of the 'health' identity of the sharer online. In turn, this affects and in turn encourages 'healthy' online behaviours, either through peer pressure or pleasurable motivation. Thus, we have to ask, are these pressures or motivations mentally 'healthy' for individual wellbeing? This question is particularly pertinent when we consider that the line between stress, pleasure and motivation, becomes ever more interlocked in these social media and data sharing communities. In many of the participants' cases, sharing some content deemed 'personal' or 'transparent' caused embarrassment, when considering the gaze of the community. Self-censorship, therefore, is actively managed, based upon perceived negative judgment from community members. Self-surveillance through peer surveillance then, becomes an individualised pressure for users. This in turn may encourage a detachment from the community and observed nature of sharing 'health' informatics in avoidance of additional pressures felt through the gaze of others. The representation of 'healthy' identities is achieved through, for and with the help of the audience. Surveillance of and by others influences self-tracking users' practices of self-presentation. The information produced through these devices changes users' behaviours and understandings of their bodies and what is deemed as 'healthy', which is reinforced by the feedback received from the social media community. Users feel 'healthier' through sharing 'health'-related data on social media. These digital and data-sharing cultures enable ways of experiencing and viewing one's own body and 'health', in relation to others. 'Health' behaviours have become intimately linked to constructions of the idealised 'health-self' enabled through social media. The representations of the 'healthy self' identity online, and self-tracking health behaviours offline form an interdependent process. The value of surveillance in this regard, plays a dominant role in these data-sharing cultures.

Self-surveillance through self-monitoring has been viewed as 'empowering' (Beato, 2012) enabling users to take control over their 'health' and body, externally from health institutions and wider surveillance, making "behaviour change easy, inexpensive, and unobtrusive" (Swan, 2012b: 112). This thesis has interrogated claims about the technological health revolution promised by digital health technologies by exploring the influence and impact of self-tracking health technologies upon individual health behaviours and constructions of the self. Some literature has recognised the persuasive and at times coercive design of self-tracking technologies (Purpura et al., 2011). However, this thesis enabled a detailed analysis of exactly how the regulatory design of digital health technologies impacts upon decision-making around 'health' practices and behaviours. 'Empowerment' was temporal, and relatively short-lived, as most participants who adopted self-tracking technologies did so to achieve personal targets (doing marathons or reaching weight-lifting goals, for example). Through the continual monitoring and sharing of these practices via

these technologies and social media, the self-regulation became overwhelming, forcing participants to 'digitally detox' (take a break from social media for weeks/months) or quit altogether. Furthermore, the continual comparisons and competitions of life(style) representation on social media highlighted individuals voids or perceived 'inadequacies' in their own lives, and in their own bodies.

A key finding of this thesis is the role and utility of its methodological approach. The reflexive and influential role of the methodologies for the participants and the researcher was not anticipated prior to the research period. The triangulation of these methods enabled a deep analysis of the online and offline continuum of the digitisation of health practices and personal behaviours. The reflexive diaries were integral to aiding the participants' personal engagement with and understanding of their 'health' decisions, lifestyle choices and social media use. Self-tracking technologies and social media, therefore, can be seen as an extension of the self, mediating our relations, communications and the 'health' self-quantification of our being. This problematic convergence of the body and technology through health, fitness and lifestyle tracking is an inherent self-governing and self-regulatory practice, which deeply permeated the participants' everyday lives. These research findings extend Lorig and Holman's (2003) argument, whereby it is not just sufferers of chronic conditions but the everyday layperson, who now embodies this dominant discourse. Health self-management, when not enacted similarly becomes tied to personal blame (and shame) over lack of personal responsibility and poor 'health' management. Therefore, policy and the market work in tandem to construct and discursively embed the ideal neoliberal subject; a normative, fit and productive bio-citizen (Moore and Robinson, 2016; Rail and Jette, 2015). The accumulation and examination of data causes extreme self-regulating pressures for self-trackers, provoking stress and anxiety, which dissolves the division between the interior and exterior of the body and blurs distinctions between the biological and the social (Rose, 2013), thus normalising the 'datafication of life itself' (Ajana, 2017: 14). The participants did feel empowerment in relation to self-managing health through self-tracking data acquisition. Yet, over time these (physical) activities could not always be 'lived up to'. As much as the abundance of data does not assume something productive is done with it, similarly, feeling empowered may soon turn to disempowerment if nothing can be achieved, and the hoped for 'health revolution' does not materialise. Information and ideas from social structures do not merely reflect the social world but contribute to its shape and are central to modern reflexivity. Therefore, interestingly, interpretations and rationalisations for these 'journeys' and 'health transformations' were incredibly subjective. The methodological approach of this thesis interestingly also became an integral tool for the participants to understand 'health' decisions and practices, expanding their conceptualisations and influencing future posts, diary entries and subsequent 'health' behaviours. At times this self-analytical reflexivity was 'uncomfortable reading' for the participants, as it highlighted their troublesome and problematic relationships with their 'health', bodies and lifestyles, particularly around obsessive and compulsive behaviours of 'over-exercising' and food and calorie regulation. Many of the participants recognised they had 'unhealthy' relationships with

how they perceived their bodies, low self-esteem and embodied self-policing regulation over their lifestyles and 'health'-related behaviours, which frequently dictated what they were and were not allowed to do. This regulation discourse was deeply embedded in their sense of moral self. To enact certain 'healthy' behaviours was to be a 'good' person. To 'slip out' of regulatory regimes, even due to external or uncontrollable factors in their lives (stress, ill health, injury, time constraints etc.), meant that participants felt deeply ashamed and their perception of self was of a 'bad', undisciplined individual. As Cederstrom and Spicer (2015: 5) argue, wellness is not a choice but a "moral obligation", so too can be understood of how we perceive and manage our health.

Interestingly, what good 'health' meant was subjectively interpreted by all the participants, but surprisingly, they all exhibited a commitment to 'health' in whatever goal-orientated capacity that was individually determined. Commitments to 'health', being 'healthier' and 'getting fitter' (through exercise and consumption practices) became the focal point in dictating and controlling lifestyle and 'health'-related behaviours. Commitments to being 'healthy' were so subjectively interpreted that being 'healthy' at times, almost lost its meaning, and became muddied by over-regulatory commitments to self-tracking and 'personal rehabilitation' (Cederstrom and Spicer, 2015: 134).The participants' processes of 'committing' to health goals over time became the dominant guide, embodying a commitment to regulation and self-optimisation, regardless of any impacts upon physical health or mental wellbeing. Interestingly, the regulatory use of these technologies was extremely influential over health behaviours, advocating a moralism of 'health' internalised through privatised self-policing, but which over time detrimentally affected their sense of self-worth and wellbeing.

The engagement with self-tracking practices led the participants to overvalue the data representations of their 'health' and their bodies. What then does it mean if we only recognise the information about ourselves that these technologies capture? We need to explore the ongoing effect of sharing 'health' and the body on social media as a tool for 'health' management and self-care, and in turn, the physical pressures experienced through the inherent self-policing and regulatory politics of self-tracking and self-monitoring. Problematically, representations of 'good health' on social media became the focus for participants, often over undertaking 'healthier' activities. These representations of 'health' frequently stood in for participants' actual physical 'health' (improvements), without motivating them to 'get healthier'. This could be hugely problematic, if over time representations of 'health' rather than actual health outcomes become prioritised. In turn, we may "trust the machine's representation more than our own memories" (Rettberg, 2018: 29). Habits related to posting and self-tracking can be conceived as governable in these data sharing cultures. Self-tracking makes "past and current events equally knowable. The very ideas of "past" and "present" in relation to personal information are in danger of evaporating. The past is on the surface" (Allen, 2008: 62). The role and nature of human memory to be forgetful or to omit certain things may protect us from traumatic past events. This draws attention to the complexities of human senses and capabilities, one that a computer or self-tracking technology could never

imitate. Biological memory serves us well, but it is highly selective and fallible *(ibid).* With social media and self-tracking technologies, what happened in the past and what happened today are now equally 'knowable'. Yet, memory and data are two very different things. Data is limited, while memory is complex, supportive, and adapts to suit the needs of every individual. Data is only individual in so much as it is specific to you. The human mind, memory, senses, instinct and intuition can and do tell us more than data. The participants celebrated the capacities for the human mind to provide voluntary amnesia from traumatic events, while data representations drew painful attention to them. As Allen (*ibid*: 55-56) astutely observed:

> Memory can be a very good thing, but it can also encourage harmfully dredging up or revisiting past conduct. Surveillance can also be a very good thing, but it turns into a social evil when it trains watchful, spying eyes needlessly and hurtfully.

Nostalgia is our own invention (Foucault, 1988) and yet holds powerful parameters for the 'optimal' body, providing idealised notions of 'health' and our relationship to past healthy selves and disciplinary acts. This is especially prevalent when identified as not a reality in the present time or in the present body. Self-tracking proposes mutations in our very idea of life. The pure mechanism of our bodies and our brains have become engineer-able apparatuses. This takes us beyond the binary of the normal and the pathological. With these technologies, we routinely take our normality into our own hands. These technologies cannot consider the non-sequential nature of ill health and disease. How then can we disregard elements that we cannot quantify or neatly capture, especially if, in turn, we increasingly limit our understanding of life itself, and within it, pathologies and 'health'?

Self-tracking is not just about the technology, but rather about what it means when people use these technologies and the physical, mental or emotional changes that occur (Butterfield, 2012). Even when technology is removed or resisted in these surveillant and self-tracking cultures, regulation of the body with or without the tools and technologies of the self, is still prevalent, preventative and self-policing in the mind of the users. This dualism then, where the mind is conceived as holding a powerful condition over bodily matter (Moore and Robinson, 2016), situated the participants as actors who must 'control' and take responsibility for their biology. Problematically, this removed their recognition of physical impossibilities, as the discourses that surround these technologies, remove subjectivity, and the important medical and biological recognition that all bodies do not behave or perform in the same way. Nor do all bodies have the same capacities and will not 'transform' through calculated or measured intervention, no matter how much one person may want to 'better' or 'optimise' themselves. This perspective is forming a new social shaping and understanding of bodily capacities. The reduction of the body to data or technological interpretation is shaped and formed by the meanings in which they are enmeshed. Yet, these embodiments engage with shaping processes and realities provided only by using these technologies alone.

These research findings have identified a discourse that encourages individuals to prioritise the 'maximisation' and 'optimisation' of what we have come to believe is our quality of life.

Problematically, this continual management should, as it has been demonstrated, not be reduced to 'good' or 'bad' representations of 'health', nor should specific qualities and determinants of certain 'lifestyle realities' be privileged over others. These surveillant, monitoring, competitive and comparative technologies propose such binaries through enslaving users through forms and tools of engagement. When these regulatory frames can be finally resisted, and digital detoxing liberates, the technologies' presence and role is still committed in the minds of its users. These are technologies of control, over the body and mind, for when they are finally removed, they still situate their (prior) dominance and pervasive self-regulation in the present time and in the present minds of their users. These complex ensembles of knowledge, technologies, subjectivities and ethics suggest the perception, expectation and hope of a healthier, fitter, 'better' and 'optimised' future. Individual quality of life, therefore, becomes about perception and expectation as advocated by the technology. These technologies imagine the future; they force us to bring the future into the present by controlling our bodies. We manage the present body in order to produce a better 'healthier' future, and we demand the future body as a right and a reward for past 'health' management.

9.3 Limitations and Future Research

This final section of this concluding chapter will discuss broadly the limitations of the thesis, as well as future research, which could be explored from these findings. A detailed examination of the limitations of the methodologies used in this thesis is discussed in the Research Methodology chapter (Three). A limitation of this thesis could be conceived in terms of the relatively small number of participants (fourteen) who took part in the research. Less methods and more participants would have provided a greater scope. However, this thesis was concerned with analysing in detail the practices and processes of using social media and self-tracking technologies in self-representations and the individual management of 'health'. Therefore, the triangulated methods of interviews, reflexive diaries and online content, provided a great depth of insight and analysis. To apply the same methods of data capture to more participants would have produced an unviable amount of empirical data to analyse within the scope of this doctoral thesis. Another limitation of this thesis could be conceived in the changing and evolving functions and affordability of social media and self-tracking platforms. However, this thesis did not explicitly analyse the platforms themselves but rather how users navigate their use of and relationship with them. Therefore, future research could attend in more detail to how these platform functions evolve, and how individuals traverse these changes from a user's perspective.

The empirical findings of this thesis could be used to frame future research around how individuals navigate the 'datafication of health' (Ruckenstein and Schull, 2017: 262), communication and identity in digital societies, with a specific focus on the practice and role of individual 'self-imposed' and wider systemic normalised (corporate, state and institutionalised) surveillance, enabled by digital mobile devices and platforms. When considering future research avenues, it is worth recognising the utility of accessing user insights and practices through the specific ethnographic methodologies used in this thesis, which could similarly be adopted for further investigation of (social) platforms and

apps from a user's perspective. The triangulation of the methodological approaches, and in particular inclusion of the under-used method of reflexive diaries enabled attention to be usefully drawn to the private minds of the users, in combination with the capture of online data to gather text from which to draw reflections, whilst contextualising findings through semi-structured interviews. This enabled attention to be drawn to the critical and long-term temporal reflection on these user practices (as well as personal insights for the research participants) and understanding of these platforms, providing empirical research currently missing from digital cultures literature. Yet, this thesis could be critiqued on the basis that it provided such a wealth of data that smaller participant groups are only viable in order to manage such quantities of data analysis. Yet, if the focus is on the depth of analysis, as a means of understanding users' processes, practices and engagement with digital spheres and platforms, this thesis has provided a novel methodological approach for future research. This approach enables the ability to analyse multiple digital spheres and platforms from the perspectives of the user, providing a new lens and methodological approach from which to explore distinctions between online and offline negotiations or 'divides'.

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APPENDIX ONE

INTERVIEW SCHEDULE

Participants:

1. 'Amy', Female, 27, Professional Singer, Brighton, UK

- Cancer/ chemotheraphy patient, blogs autobiographical narratives of health and cancer treatment.

Sharing content on Facebook and Instagram.

- First interview: 24/12/16. Completion and final interview: 24/4/17.

2. 'Lara', Female, 28, Transfer Bus Co-ordinator and 'Jazzercise' instructor, Chamonix, France

- Self-tracking runs and snowboarding, Yoga photography. Sharing on Facebook and Instagram.
- First Interview: 01/12/16. Completion and final interview: 27/5/ 17

3. 'Lou', Female, 29, Advertising Account Manager, London, UK

- Self tracking runs (marathon training). Sharing content on Instagram.
- First interview: 01/12/16. Completion and final interview: 28/4/17.

4. 'Jennie', Female, 40, Marketing Executive, London, UK

- Food photography, fitness selfies. Sharing content on Instagram.
- First Interview: 20/12/16. Did not complete diary or final interview.

5. 'Sophie', Female, 31, Business Development Manager, Torquay, UK

- Self-Tracking runs (Marathon Training), Food photography and fitness selfies. Sharing on Facebook and Instagram.
- First Interview: 19/12/12. Completion and final interview: 8/5/17.

6. 'Eve', Female, 26, Legal Secretary, Maidenhead, UK

- Self-tracking runs, marathon training, fitness selfies. Sharing content on Instagram.
- First Interview: 20/12/16. Did not complete diary or final interview.

7. 'Annie', Female, 28, Fitness Instructor, Brighton, UK

- Autobiographical narratives of fitness, and recovery from brain surgery, self-tracking runs, gym fitness selfies. Sharing content on Facebook and Instagram.
- First Interview: 20/12/16. Completion and final interview: 17/6/17.

8. 'Matt', Male, 41, Electrician, Cardiff, UK

- Fitness selfies, bodybuilding photos. Sharing content on Facebook and Instagram.
- First Interview: 20/12/16. Completion and final interview: 28/6/17

9. 'Fet', Male, 30, Teacher, Brighton, UK

- Self-Tracking cycling (Strava). Sharing content on Facebook and Instagram.
- First interview: 14/12/16. Completion and final interview: 20/5/17.

10. Ryan, Male, 30, Sales Executive, Ontario, Canada

- Self-tracking of fitness/bodybuilding, fitness selfies. Sharing on Facebook and Instagram.
- First Interview: 19/12/16. Did not complete diary or final interview.

11. 'Tim', Male, 34, Electrician, Winchester, UK

- Yoga selfies, and self-tracking running. Sharing content on Facebook and Instagram.
- First interview: 19/ 12/16. Completion and final interview: 1/6/17.

12. 'Roy', Male, 26, Student, Denmark

- Hand-balancer and weightlifter. Sharing gym photos/videos on Instagram.
- First interview: 04/01/14. Completion and final interview: 5/4/17.

13. 'Osten', Male, 30, Photographer, Barcelona, Spain

- Food photography and self-tracks runs. Sharing content on Facebook and Instagram.
- First Interview: 14/10/16. Did not complete diary or final interview.

14. 'Nigel', Male, 49, Consultant, Bath UK

- Self-tracking running. Sharing content on Facebook.
- First Interview: 28/10/16. Did not complete diary or final interview.

First Interview Questions:

1. What is 'health'?
2. What does the word 'health' mean to you?

3. How do you determine whether you are in good physical or mental health?

4. Who do you feel is responsible for your health?

5. What does being body or image conscious mean to you?

6. What do you feel are the aspects or parts of your life that influence your health practices and behaviours? (This does not necessarily have to be food or fitness-related).

7. Can you tell me what you are sharing on social media, on which platforms and why?

8. Do you think about how you are perceived on social media? If not, why not? / If so, in what ways?

9. What is the role of community feedback (and 'likes' etc.) for you, and how does that make you feel?

10. Have there ever been any unintended consequences of sharing anything online? Or any kind of unexpected feedback or interaction that has impacted you in any way?

11. Have you changed any of your health practices / behaviours/ lifestyle since you have been sharing on social media / self-tracking? What changes have you made?

12. Whilst exercising/ when you were training for (X) were you / did you use any self-tracking apps and were you sharing this data?

13. From a user perspective, how do you find the self-tracking apps to use (to prompt: user-friendly / (in)efficient / (in)accurate)?

14. What do you think about data mining, privacy and surveillance?

Final Interview Questions:

1. How did you find the whole process of writing the diary?

2. What were the challenges or benefits for you of engaging with the reflexive diary?

3. Did completing the reflexive diary affect your health or fitness practices in any way? Can you tell me about any of these changes?

4. You had an injury / illness / lifestyle change and I was interested in how you felt when you were not able to do (health-related activities / tracking / sharing) because of that?

5. Many participants have mentioned pressures to be being seen as 'the healthy one' / pressure to use the self-tracking technology / pressure to share. Can you expand?

6. What did the break in health practices / tracking / sharing make you feel / enable you to do?

7. Can you tell me more about the nature of checking your feedback and 'likes'?

8. You mentioned a pressure to look 'good enough'. I wondered what 'good enough' is and how you determined that?

9. Has anything changed since you finished the diary or since being a participant for this study? If so, what changes have occurred, and what impact have they had on you?

10. What are your perspectives on data mining, privacy and surveillance now?

11. What does health and fitness mean to you now?

12. In regard to your health management, sharing and self-tracking practices, what do you think your future practices/behaviours will be?

Reflexive Diary Template

The Use of Self-Tracking and Social Media in Self-Representations and Management of 'Health'

Reflexive Diary

Diary Outline, Aims and Instructions

Thank you for agreeing to keep a reflexive diary. This 3-month diary is specifically interested in *your* day-to-day experiences of *your* process of using *Facebook*, *Instagram*, any self-tracking platforms, and associated health-related behaviours, decisions and actions. Please try to fill in the diary twice a month, on different days of the week if possible, totalling 6 entries. Please also include a screen shot of your social media sharing on this day.

Look back over the day and think of times, places or events where you became aware of your health choices or consumption practices and consider how this made you feel. This may have arisen through comments said to you in person or from the online community (or lack thereof), something you hear or see, your reaction to a device or social media application, or a related news story. Please feel free to expand as much as you like.

With any further questions or queries during this period please do not hesitate to contact Rachael Kent on rachael.kent@kcl.ac.uk/ +44 (0) 7737 830275.

ENTRY 1 DATE:

USAGE

1. Did you use any self-tracking, health or lifestyle apps or social media platforms today? If so, for what, and why? If not, why not?

(Forgot / did not want to / for consumption monitoring and/or exercise monitoring, sharing content/data, sharing lifestyle)

2. How did you feel after usage /or once you had decided not to use the application/platform?
(Happy, satisfied, proud, frustrated, guilty, annoyed, relaxed etc.)

SELF AND COMMUNITY

3. Did you share any content of your health behaviours / lifestyle today on any form of social media, and if not, why not?
- What were your motivations behind sharing or privatising your content/data?
- How did this make you feel?
- Did you get any feedback / responses (or lack thereof) from other users and how did this make you feel?

4. Did you discuss your health or lifestyle choices with any of your social circle during any communications today (family, friends, colleagues etc.)?

- How did that make you feel?
- Did this make you feel competitive with your peers?
- Did this encourage you to change your health practice, current fitness levels or change your consumption (eating/drinking) habits in any way?

5. Did you feel your health decisions today contributed to your sense of self?
(As a 'healthy' gym goer for example, or having a day off exercise, or a food 'cheat' day for pleasure or relaxation)

PROCESS

6. Can you identify what (if anything) influenced and motivated your health choices and lifestyle today? (What you chose to eat/drink, whether you did any exercise, or abstained from any foods/drink/exercise?)

- Influences from friends, social media content etc.
- From the application / social media itself?

7. Were there any unintended/unexpected consequences of using social media / technology today?
- Were there feelings and/or actions and activities in which you had not expected to feel or enact/achieve?
- How did that make you feel and how did you respond to these unintended consequences?

8. Did you find the decisions you made about your health today were at all related to external factors (Stress, work, personal commitments etc.)?

Screen Shot of Online Content: **Date:**

APPENDIX TWO

ETHICS FORMS

Information Sheet Template:

INFORMATION SHEET FOR PARTICIPANTS

REC Reference Number: LRS-15/16-2156

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of study The Use of Self-Tracking and Social Media in Self-Representations and Management of 'Health'

Invitation Paragraph

I would like to invite you to participate in a 3-month study which is a part of my Ph.D. project on how individuals use social media, and/or digital health technology to represent their health practices on Facebook and Instagram.

The project is interested in how online self-representations, through digital health applications, Facebook and Instagram, influence offline health and lifestyle practices. The 3-month participation will take the form of bi-monthly online data capture, bi-monthly reflective diaries, and two interviews.

What is the purpose of the study?

Through ethnographic research, this thesis explores how health practices of digital health technology and/or converged social media (Facebook and Instagram), impacts and influences upon health practices, both on and offline.

Why have I been invited to take part?

The project will undertake ethnographic research with 14 participants who use social media and/or digital health technology on a weekly basis to share their health, wellbeing or exercise practices.

Do I have to take part?

No, this is voluntary participation.

What will happen to me if I take part?

Participation includes online data collection, guided reflexive diaries, and semi-structured interviews.

Incentives (where relevant)

N/A

What are the possible benefits and risks of taking part?

The benefits to the participant will be the self-exploration of their digital health, social media practices and online behaviour. No risks are foreseen or expected.

Will my taking part be kept confidential?

Yes, confidentiality will be maintained throughout the project, and participants' feedback will be anonymised.

How is the project being funded?

European Research Council

What will happen to the results of the study?

The results of the study will be used for doctoral thesis, conference presentations and publications.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Rachael.kent@kcl.ac.uk / 07737 830275

What if I have further questions, or if something goes wrong?

If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact King's College London using the details below for further advice and information:

Dr. Btihaj Ajana
Senior Lecturer
CMCI/Digital Humanities
King's College London, Room 222, 26-29 Drury Lane, London WC2B 5RL
btihaj.ajana@kcl.ac.uk

The Chair: A&H Research Ethics Panel REP Reviewer rec@kcl.ac.uk

Thank you for reading this information sheet and for considering taking part in this research.

Ethics Forms: Consent Form Template

CONSENT FORM FOR PARTICIPANTS IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

KING'S College LONDON

Title of Study: The Use of Self-Tracking and Social Media in Self-Representations and Management of 'Health'

King's College Research Ethics Committee Ref: LRS-15/16-2156

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box I am consenting tc this element of the study. I understand that it will be assumed that unticked/initialled boxes mean that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study. ☐

1. *I confirm that I have read and understood the information sheet dated 01/12/2016 for the above study. I have had the opportunity to consider the information and asked questions which have been answered satisfactorily. ☐

2. *I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Furthermore, I understand that I will be able to withdraw my data up to 30/04/2017. ☐

3. *I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the UK Data Protection Act 1998. ☐

4. *I understand that my information may be subject to review by responsible individuals from the College for monitoring and audit purposes. ☐

5. Anonymity is optional for this research. Please select from the following 3 options: ☐

    a. I agree to be fully identified ☐

    b. I agree to be partially identified ☐

    c. I wish to remain anonymous ☐

6. I agree to be contacted in the future by King's College London researchers who would like to invite me to participate in follow up studies to this project, or in future studies of a similar nature. ☐

7. I agree that the research team may access my academic/membership/ medical records for the purposes of this research project. ☐

8. I agree that the research team may use my data for future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee. (In such cases, as with this project, data would/would not be identifiable in any report). ☐

9. I understand that the information I have submitted will be published as a report and I wish to receive a copy of it. ☐

10. I consent to my interview being audio/video recorded. ☐

11. I have informed the researcher of any other research in which I am currently involved or have been involved in during the past 12 months ☐

_____	_____	_____
Name of Participant	**Date**	**Signature**
_____	_____	_____
Rachael Kent	**Date**	**Signature**